

REPUBLIC OF MACEDONIA
PUBLIC ENTERPRISE FOR STATE ROADS

National and Regional Roads Rehabilitation Project
and
Road Upgrading and Development Project
TERMS OF REFERENCE
CONSULTING SERVICES

Road User Satisfaction Survey

Background

Road transportation infrastructure in the Republic of Macedonia is characterized by relatively high density, exceptions being highways. As a landlocked country, The Republic of Macedonia is particularly dependent on a well-developed road and rail network for its economic and social development. Key elements of his network are also part of the Trans-European transport network (Corridor X, which goes from Austria to Turkey, and Corridor VIII, which connects Albania with the Black Sea ports in Bulgaria). Since its independence, the main challenges facing the country have been to reduce the economic distance to markets and lower the costs of transportation arising from poor road conditions along Corridor X and major delays at key border crossing points. It is precisely the road transport network, which plays a critical role in the development of the economy, as it carries the bulk of the country's exports/goods (in the first

two quarters of 2013, 93 percent of freight was carried on roads). An enhanced transport network would also contribute to poverty alleviation by providing better quality access to national and international markets of the rural population. A government priority is thus to upgrade and rehabilitate road infrastructure to improve future growth prospects.

The World Bank is currently supporting Macedonia's transport sector with two recently approved lending projects: i) The National and Regional Roads Rehabilitation Project (NRRRP) aimed at enhancing the connectivity of selected national and regional roads, primarily linked to Corridors X and VIII; and ii) the Road Upgrading and Development Project (RUDP) which focuses exclusively on Corridor VIII through a major upgrade of the east section of the corridor between Skopje and the border with Bulgaria.

Besides from a series of transportation-related outcomes, including time savings, reduced transport costs, and improved road safety, both of these projects are ultimately geared at alleviating poverty and boosting shared prosperity, the two corporate goals under the World Bank Group strategy. By removing transport bottlenecks in the national and regional road network, it is expected that poor and disadvantaged communities will enjoy higher connectivity allowing them to engage in regional value chains, thus creating possibilities for income generation. This is particularly the case for areas with notable agricultural production and areas close to already operating free economic zones.

Additionally, improved transport links should contribute to improving the living standards of citizens by providing safer, cheaper and more reliable access to education and social services. The rehabilitation of national and regional roads will bring better connectivity and safer roads to a catchment area of up to 1.2 million inhabitants. Main project beneficiaries include road users who would have improved connectivity to public amenities and services, reduced travel time, reduced vehicle operating costs, and reduced road crash risks. The present TORs focus on the perceptions, beneficiary feedback and expectations of road users exclusively.

Objective

The activities set out in this TORs aim to inform the design and implementation arrangements of two projects; the Macedonia National and Regional Roads Rehabilitation Project (NRRRP) and Road Upgrading and Development Project (RUPD), specifically the level of satisfaction of different road users along Corridor VIII and a sample of local and regional road sections under the NRRRP (See annex for detailed identification of road sections under the program) and RUDP. The main goal of this highly quantitative survey would be to develop a subjective Road User Satisfaction Survey which reports respondent's perceptions about different parameters related to the roads to be rehabilitated under both projects. Such index would reflect some of the following road characteristics: 1) value for time and money, 2) road infrastructure, 3) road markings and sign, 4) road safety, 5) comfort, among other parameters to be identified by the consultant jointly with the World Bank. The survey and report that will be produced should identify perceptions, experience and expectations related to road usage in project target areas.

Accordingly, the specific survey objectives are:

- Identification of road user satisfaction indicators;
- Development of methodology for calculating a Road User Satisfaction Index (RUSI);
- Definition of the level of satisfaction in various road user segments (main and vulnerable users);
- Definition of the main needs and expectations of road users;
- Development of the road users' socio-economic profile.

The findings from this survey will be used as a baseline indicator for the monitoring and projects' results framework.

Activities

The expected outputs and activities are divided into following categories:

- a) Methodological proposal for carrying out the survey,
- b) Road User Satisfaction Surveys along Corridor VIII and a sample of project roads included in the NRRRP and RUDP,
- c) Development of the Road User Satisfaction Index,
- d) Presentation of findings and recommendation in survey report.

a) Methodological proposal: The consultant will initially develop a methodological proposal for data collection and for identifying the beneficiaries along the road. This proposal should include the questionnaire that will guide the data collection activities as well as the sampling strategy and location of survey points. The annex provides a sample survey which should be used for illustrative purposes only and adapted to the specific context of Macedonia and both Projects. The list of survey points and settlements where the analysis will take place should be discussed and approved by the Public Enterprise of State Roads (PESR), the Projects' implementing agency, and the World Bank. The consultant will also propose a list of contents for this activity to be agreed with the Bank. Finally, the methodological proposal should include information on how the road user satisfaction index is to be constructed, suggesting the parameters that will be used (See example below)

b) Road User Satisfaction Surveys: In the road sections and survey points identified above, the consultant will carry out quick traffic counts and deliver road user satisfaction. This activity will help to provide a definition of the level of satisfaction in various road user segments (main and vulnerable users) together with the definition of the main needs and expectations of road users. While the total number of surveys to be carried out along Corridor VIII and the regional road network is to be defined as part of the methodology based on the average daily vehicle traffic, it should be no less than 1000 vehicle for Corridor VIII and 1000 vehicles for the 10- road sections of the NRRRP and RUDP. It is expected that this activity provides basic road users' demographic and socio-economic profile.

c) Development of Road User Satisfaction Survey: The Road User Satisfaction Index represents the overall satisfaction of road users. It consists of a composite index aggregating several parameters related to road quality defining road users' satisfaction. The weight of each parameter varies depending on how road users rate the road. An example on how the weights are measured is provided below.

Table 1 – Example of Factors defining the satisfaction of road users with weights

	Project Target Area
Value for Time and Money	39%
Road Infrastructure	25%
Road Markings and Distance Signs	20%
Road Amenities	10%
Safety	4%
Travel Comfort	2%
User Satisfaction	100%

Based on amount of explained variance in road users satisfaction, in this example, the most important parameter defining the road users satisfaction is “value for time and money,” which is related to the passenger spending extra time for travelling on a specific road and furthermore, spending extra money for fuel and vehicle maintenance.

The second and third parameters that define road users' satisfaction are the road infrastructure and the road markings and distance signs. Good road infrastructure is associated with bridges and roadsides for the road user.

Other parameters such as Travel Comfort, Road Amenities (food facilities, drinking water, medical facilities and parking) and Safety are less important in constituting road users' satisfaction, but still relevant.

It is expected that the consultants include details on how the Road User Satisfaction Index could be constructed, together with the questions that would accompany the survey.

d) Presentation of findings and recommendation in survey report. The main report should include a summary of the sampling strategy, a short description of the socio-economic profile of road users, the explanation of how the road user satisfaction index was constructed, a summary of findings, and some policy implications and recommendations drawn from the survey responses.

Deliverables as part of the Road User Satisfaction Survey

- a) **Raw Data and Information processing:** Databases in SPSS, STATA or Excel.
- b) **Data analysis:** It is expected that the consultant carries out relevant cross-tabulations and desegregation to examine more specifically the responses of women, low income groups and other vulnerable road users, such as motorcyclists and pedestrians.
- c) **Report:** The final report should integrate the survey results and the calculation of the road user satisfaction index, emphasizing the findings of how both projects could improve road quality and address the main concerns of users and indirect beneficiaries. The report should also make some recommendations for the improvement of the design of future actions, projects and programs in the transport sector in Macedonia.

Deliverables and Timeline

The project will follow the investment loan and the completion will correspond with the completion of the loan..

The Inception report will be completed no later the 1 month from the Contract signing.

Ex ante road user satisfaction report will be delivered within 4 months after the Contract signing and for all sub-projects that have not started

Ex post road user satisfaction report will be delivered within 4 months after the completion of each rehabilitated project.

Draft Final Report will be delivered by the end of the contract and will be a sublimite of all findings (ex-ante and ex-post reports as well as policy recommendations) for above sub-projects.

Final Report will be delivered within 2 weeks after the provision of comments to the Draft.

Dissemination conference will be organized in PESR within 3 weeks after the acceptance of Final Report.

Procurement method and payment

Consultant will be selected under Consultant Qualification (CQ) method according the World Bank's *Guidelines for Selection and Employment of Consultants Under IBRD Loans and IDA Credits & Grants by World Bank Borrowers (edition of January 2011)*.

Schedule of payments will be as follows:

	Deliverable	Date Due (from Contract Signing)	Payment (% of total of Contract Price)
1.	Inception Report	1 months	15
2.	Ex ante User Satisfaction Report	4 months	25
3.	Ex post User Satisfaction Report	34 months	20
4.	Draft Final Report	38 months	15
5.	Final Report and Dissemination	40months	25

Consultant Qualifications and other requirements

The core team should be comprised of Team Leader, Traffic Engineer/Specialist and Social Survey Specialist and other non-core noncore team members such as facilitators, interviewers, assistants.

The task team should have relevant experience in design and measurement of transport-related outcomes and the execution of road user satisfaction surveys. The traffic engineer/specialist should provide guidance on sampling plans together with the design of volumetric traffic and road user satisfaction surveys.

The task team should have relevant experience analyzing quantitative data (household and facilities) using statistical analysis software (preferably STATA but SPSS and Excel is acceptable).

The team of consultants must have previous successful experience with carrying out socio-economic assessments or similar services, preferably in the road sector.

The Team Leader should be a Social Scientist or any other relevant profession; with at least 10 years total experience and with at least 5 years' experience years' experience of carrying out socio-beneficiary surveys/program evaluations. The consultant should have understanding of road rehabilitation practices and decentralization in Macedonia. The ideal candidate should have relevant experience in socio-beneficiary surveys/program evaluations assessments of national and regional roads. Fluency in spoken and written English and Macedonian in the team is required. The Social Specialist should have at least five years relevant experience.

The expected LOE (level of effort) for Team Leader is 6 months, LOE for the traffic engineer is 6 month and for the Social Specialist is 6 months.

Firm requirements and qualifications:

- 5 years on the market;
- At minimum 3 realized similar surveys in the last 5 years;
- The consultants confirms availability of team of key experts such as relevant experience in design and measurement of transport-related outcomes and the execution of road user satisfaction surveys and the traffic engineer/specialist for the quantitative survey ToR and

- For the qualitative survey ToR the firm confirms availability of key experts on carrying of socio-beneficiary surveys/program evaluations.

Support by PESR to consultant

PESR will make available to the consultant sections from the municipalities project submissions and detailed designs relevant to the socio-beneficiary surveys/program evaluations assessments of national and regional roads. PESR will notify all sample municipalities about the upcoming research and will assist the consultant in making appointments with all relevant municipality officials as well as will assist in providing relevant data from pertinent central government institutions.

Duration of the Assignment

The contract will be a framework contract that will last no longer than September of 2019. The duration of the framework contract will be approximately 3.5 years and will follow the cycle of the preparation and completion of each road rehabilitation section.

Reporting

An Inception report shall detail the proposed methodology operational aspects of doing the interviewing, work plan and municipalities and local communities to be interviewed. It will present any proposed additions to the TOR in light of the initial desk studies.

The Inception Report will be submitted electronically to PESR, and to the World Bank, no later than 21 calendar days after the Consultant commence the services. The comments of the PESR and World Bank will be transmitted to the consultant no later than 2 weeks after the date of submission of the Inception Report.

The Consultant will submit the Final Report to PESR, and to the World Bank. This Report will include as a minimum:

- Table of Contents and an Executive Summary;
- Summary of principal results of the assessment and recommendations including any suggestions for current similar investment programs;
- Detailed analysis of observations from the research.

All reports will be submitted in English and Macedonian language. Also, all reports will be transmitted electronically through E-Mail. The reports will use standard software (WORD, EXCEL, etc.).

Annex I: Road Sections Subject to Rehabilitation under the NRRRP

1. Rehabilitation on national road A3, section Bitola-Makzai;
2. Rehabilitation on the national road A3, section Resen – Bukovo;
3. Rehabilitation on the regional road 1105GP, section Nov Dojran-Nikolic;
4. Rehabilitation on the regional road R1402, section Mokrino-Smolare;
5. Rehabilitation on the regional road R2343, section Delcevo-Golak;
6. Rehabilitation on the state road A3, section Kocani-Delcevo;
7. Rehabilitation on the regional road R 2335 and R2336, section Lazani-Ropotovo-Crnliste;
8. Rehabilitation on the state road R 2335, section Krivogastani-Obrsani-Vogani;
9. Rehabilitation on the regional road R1202, section Novo Selo-Bunec;
10. Rehabilitation on the regional road R1202, section Bunec-Mavrovi Anovi;
11. Rehabilitation on the regional road R1202, section Debar-Boskov Most;
12. Rehabilitation on the regional road R2233, section Brvenica-Cegrane;
13. Rehabilitation on the regional road R2249, section Melnicki Most-Centar Zupa.
14. Construction on express way A2, section Rankovce-Kriva Palanka.

Annex II: Example of Road User Satisfaction Survey

QUESTIONNAIRE PASSPORT

A. Interviewer's last name	<input style="width: 90%;" type="text"/>	B. Survey	
C. Supervisor's name		D. Date	
E. Interview started:	<input style="width: 40%;" type="text"/> hour <input style="width: 40%;" type="text"/> min.	F. Interview ended:	<input style="width: 40%;" type="text"/> hour <input style="width: 40%;" type="text"/> min.
G. Quality inspector's	H. Coder's	I. Data operator's	J. Data entered: <input style="width: 40%;" type="text"/> date

K. Province	
L. District	
M. PSU and name	<input style="width: 80%;" type="text"/>
N. Section of the road (location of interview)	Code of the road section <input style="width: 80%;" type="text"/>
O. Driver's mode of transport	1=Bus 2=Fixed-route taxi 3= Taxi (official or unofficial) 4= small truck 5=Large truck

MAIN QUESTIONNAIRE:

1. Type of Driver:
 - a) Private vehicle-owner
 - b) Freight truck – owner
 - c) Freight truck-employed
 - d) Passenger bus/minivan-owner
 - e) Passenger bus/minivan-employed
 - f) Taxi driver-owner
 - g) Taxi driver-employed
 - h) Pedestrians. *Given the specificity of the project, pedestrians represent an important group of road users, at least in the NRRRP road sections. Among those are females, low income population, etc. Therefore, it is suggested to carry our survey in places where road crosses the villages/cities.*

- i. Maintenance works carried out by the road agency.
9. Taking into consideration the questions above and points discussed, what is your level of satisfaction with the road section:
- a. Very satisfied
 - b. Satisfied
 - c. Somewhat satisfied
 - d. Unsatisfied
 - e. Very unsatisfied
 - f. N/A
10. If you could allocate resources to improve this road section, which (3) aspects would you prioritize:
- 1=Install hard surface pavement of the road
 - 2=Install lighting for the road
 - 3=Smooth the road
 - 4=Provide a line for public transportation vehicles
 - 5=promptly remove snow/ice
 - 6=Provide bike lanes
 - 7=Widen the road > Where, exactly?
 - 8=Provide areas off the road for vehicle stopping > Where, exactly?
 - 9=Make/ renew road markings for vehicles > Where, exactly?
 - 10=Install signs for managing traffic and speed > Where, exactly?
 - 11=Install necessary signs for U-turns/changing lines > Where, exactly?
 - 12=Build sidewalks > Where, exactly?
 - 13=Make more convenient bus stops > Where, exactly?
 - 14=Make pedestrian crossings more convenient > Where, exactly?
 - 15=Other WRITE DOWN
 - 16=EVERYTHING IS OK, AND NOTHING NEEDS TO BE DONE
 - 17=No answer
11. What positive consequences do you expect as a result of the renovation of the road (READ ANSWERS)?
- 1=Higher traffic speed

2=Time savings

3=Increase in income/ earnings

4=Less risk of accidents

5= Less risk for pedestrians and bikers accidents

6 = More amenities/services throughout the road section

7= Lower costs of vehicle maintenance

8=Does not expect any positive consequences

9=No answer

12. Interviewee's personal information:

- a. Sex: Male/Female
- b. Education: 1=Elementary school 2=Middle school 3=High school 4=Specialized secondary 5=Higher education 6=No education 9=No answer
- c. Origin _____ Destination _____
- d. Physical Disability Yes/No
- e. Age
- f. Number of children in the household.
- g. Trip motive:
 - 1) Work, 2) Study, 3) Health, 4) Tourism, 5) Family visits 6) Other