### REQUEST FOR PROPOSALS RFP # 04/2010

Country: Republic of Moldova

**Project Name: Road Sector Program Support Project** 

Credit Number: 4283-MD

Title of Consulting Services: Roads Feasibility and Detailed Design Studies

#### Section 1. Letter of Invitation

Invitation N°04/2010; Credit N° 4283-MD Chisinau April 22, 2010

#### Dear Mr./Ms.:

- 1. The Republic of Moldova (hereinafter called "Borrower") has received financing from the International Development Association (IDA) (hereinafter called "loan") toward the cost of Road Sector Program Support Project. The Borrower intends to apply a portion of the funds to eligible payments under the contract for which this Request for Proposals is issued.
- 2. The S.E. State Road Administration now invites proposals to provide the following consulting services: Design and Implementation of Road Maintenance Reform. More details on the services are provided in the Terms of Reference.
- 3. This Request for Proposal (RFP) has been addressed to the following shortlisted Consultants:
  - 1. **Swedish National Road Consulting AB** (Sweden) in association with **WSP International Sweden AB** (Sweden);
  - 2. **Egis Bceom International** (France) in association with **Egis Route** (France) and **Intexnauca** (Moldova);
  - 3. **Egnatia Odos SA** (Greece) in association with **Hill International SA** (Luxemburg) and **Search Corporation Srl** (Romania);
  - 4. **Louis Berger SAS** (France);
  - 5. **TYPSA Company** (Spain) in association with **SPT Srl** (Italy) and **Blizzard Design** (Romania);
  - 6. **KOCKS Consult** (Germany) in association with **Finnroad** (Finland) and **Universinj** (Moldova).

It is not permissible to transfer this invitation to any other firm.

- 4. A firm will be selected under QCBS and procedures described in this RFP, in accordance with the policies of the International Development Association (IDA) detailed in the Guidelines Selection and Employment of Consultants by World Bank Borrowers which can be found at the following website: <a href="www.worldbank.org/procure">www.worldbank.org/procure</a>.
- 5. The RFP includes the following documents:
  - Section 1 Letter of Invitation
  - Section 2 Instructions to Consultants (including Data Sheet)
  - Section 3 Technical Proposal Standard Forms
  - Section 4 Financial Proposal Standard Forms
  - Section 5 Terms of Reference
  - Section 6 Standard Forms of Contract
- 6. Please inform us in writing at the following address MD-2004, Bucuriei str. 12 A, Chisinau, Republic of Moldova, or at the following e-mail usatii@asd.md upon receipt:
  - (a) that you received the Letter of Invitation; and

(b) whether you will submit a proposal alone or in association.

Yours sincerely,

Vitalie Panurco Chief-Manager

#### **Section 2. Instructions to Consultants**

### 1. **Definitions**

- (a) "Bank" means the International Bank for Reconstruction and Development, Washington, D.C., U.S.A., or the International Development Association, Washington, D.C., U.S.A.
- (b) "Client" means the agency with which the selected Consultant signs the Contract for the Services.
- (c) "Consultant" means any entity or person that may provide or provides the Services to the Client under the Contract.
- (d) "Contract" means the Contract signed by the Parties and all the attached documents listed in its Clause 1, that is the General Conditions (GC), the Special Conditions (SC), and the Appendices.
- (e) "Data Sheet" means such part of the Instructions to Consultants used to reflect specific country and assignment conditions.
- (f) "Day" means calendar day.
- (g) "Government" means the government of the Client's country.
- (h) "Instructions to Consultants" (Section 2 of the RFP) means the document which provides shortlisted Consultants with all information needed to prepare their Proposals.
- (i) "LOI" (Section 1 of the RFP) means the Letter of Invitation being sent by the Client to the shortlisted Consultants.
- (j) "Personnel" means professionals and support staff provided by the Consultant or by any Sub-Consultant and assigned to perform the Services or any part thereof; "Foreign Personnel" means such professionals and support staff who at the time of being so provided had their domicile outside the Government's country; "Local Personnel" means such professionals and support staff who at the time of being so provided had their domicile inside the Government's country.
- (k) "Proposal" means the Technical Proposal and the Financial Proposal.
- (1) "RFP" means the Request For Proposal to be prepared by the Client for the selection of Consultants, based on the SRFP.
- (m) "SRFP" means the Standard Request for Proposals, which must be used by the Client as a guide for the preparation of the RFP.
- (n) "Services" means the work to be performed by the Consultant pursuant to the Contract.
- (o) "Sub-Consultant" means any person or entity with whom the Consultant subcontracts any part of the Services.
- (p) "Terms of Reference" (TOR) means the document included in the

RFP as Section 5 which explains the objectives, scope of work, activities, tasks to be performed, respective responsibilities of the Client and the Consultant, and expected results and deliverables of the assignment.

#### 1. Introduction

- 1.1 The Client named in the Data Sheet will select a consulting firm/organization (the Consultant) from those listed in the Letter of Invitation, in accordance with the method of selection specified in the Data Sheet.
- 1.2 The shortlisted Consultants are invited to submit a Technical Proposal and a Financial Proposal, or a Technical Proposal only, as specified in the Data Sheet, for consulting services required for the assignment named in the Data Sheet. The Proposal will be the basis for contract negotiations and ultimately for a signed Contract with the selected Consultant.
- 1.3 Consultants should familiarize themselves with local conditions and take them into account in preparing their Proposals. To obtain first-hand information on the assignment and local conditions, Consultants are encouraged to visit the Client before submitting a proposal and to attend a pre-proposal conference if one is specified in the Data Sheet. Attending the pre-proposal conference is optional. Consultants should contact the Client's representative named in the Data Sheet to arrange for their visit or to obtain additional information on the pre-proposal conference. Consultants should ensure that these officials are advised of the visit in adequate time to allow them to make appropriate arrangements.
- 1.4 The Client will timely provide at no cost to the Consultants the inputs and facilities specified in the Data Sheet, assist the firm in obtaining licenses and permits needed to carry out the services, and make available relevant project data and reports.
- 1.5 Consultants shall bear all costs associated with the preparation and submission of their proposals and contract negotiation. The Client is not bound to accept any proposal, and reserves the right to annul the selection process at any time prior to Contract award, without thereby incurring any liability to the Consultants.

### Conflict of Interest

- 1.6 Bank policy requires that Consultants provide professional, objective, and impartial advice and at all times hold the Client's interests paramount, strictly avoid conflicts with other assignments or their own corporate interests and act without any consideration for future work.
  - 1.6.1 Without limitation on the generality of the foregoing, Consultants, and any of their affiliates, shall be considered to have a conflict of interest and shall not be recruited, under any of the circumstances set forth below:

#### **Conflicting**

(i) A firm that has been engaged by the Client to

#### activities

Conflicting assignments

**Conflicting** relationships

provide goods, works or services other than consulting services for a project, and any of its affiliates, shall be disqualified from providing consulting services related to those goods, works or services. Conversely, a firm hired to provide consulting services for the preparation or implementation of a project, and any of its affiliates, shall be disqualified from subsequently providing goods or works or services other than consulting services resulting from or directly related to the firm's consulting services for such preparation or implementation. For the purpose of this paragraph, services other than consulting services are defined as those leading to a measurable physical output, for example surveys, exploratory drilling, aerial photography, and satellite imagery.

(ii) A Consultant (including its Personnel and Sub-Consultants) or any of its affiliates shall not be hired for any assignment that, by its nature, may be in conflict with another assignment of the Consultant to be executed for the same or for another Client. For example, a Consultant hired engineering prepare design infrastructure project shall not be engaged to independent environmental prepare the same project, assessment for Consultant assisting a Client in the privatization of public assets shall not purchase, nor advise assets. purchasers of. such Similarly, Consultant hired to prepare Terms of Reference for an assignment should not be hired for the assignment in question.

(iii) A Consultant (including its Personnel and Sub-Consultants) that has a business or family relationship with a member of the Client's staff who is directly or indirectly involved in any part of (i) the preparation of the Terms of Reference of the assignment, (ii) the selection process for such assignment, or (iii) supervision of the Contract, may not be awarded a Contract, unless the conflict stemming from this relationship has been resolved in a manner acceptable to the Bank throughout the selection process and the execution of the Contract.

1.6.2 Consultants have an obligation to disclose any situation of actual or potential conflict that impacts their capacity to serve the best interest of their Client, or that may reasonably be perceived as having this effect. Failure to disclose said situations may lead to the disqualification

of the Consultant or the termination of its Contract.

1.6.3 No agency or current employees of the Client shall work as Consultants under their own ministries, departments or agencies. Recruiting former government employees of the Client to work for their former ministries, departments or agencies is acceptable provided no conflict of interest exists. When the Consultant nominates any government employee as Personnel in their technical proposal, such Personnel must have written certification from their government or employer confirming that they are on leave without pay from their official position and allowed to work full-time outside of their previous official position. Such certification shall be provided to the Client by the Consultant as part of his technical proposal.

### Unfair Advantage

1.6.4 If a shortlisted Consultant could derive a competitive advantage from having provided consulting services related to the assignment in question, the Client shall make available to all shortlisted Consultants together with this RFP all information that would in that respect give such Consultant any competitive advantage over competing Consultants.

### Fraud and Corruption

- 1.7 The Bank requires that all Borrowers (including beneficiaries of Bank loans), as well as Consultants participating in Bankfinanced projects adhere to the highest ethical standards, both during the selection process and throughout the execution of a contract. In pursuance of this policy, the Bank:
  - (a) defines, for the purpose of this paragraph, the terms set forth below as follows:
    - (i) "corrupt practice" means the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of a public official in the selection process or in contract execution;
    - (ii) "fraudulent practice" means a misrepresentation or omission of facts in order to influence a selection process or the execution of a contract;
    - (iii) "collusive practices" means a scheme or arrangement between two or more consultants with or without the knowledge of the Borrower, designed to establish prices at artificial, noncompetitive levels;
    - (iv) "coercive practices" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in a procurement process, or affect

the execution of a contract.

- (b) will reject a proposal for award if it determines that the Consultant recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for the contract in question;
- (c) will cancel the portion of the loan allocated to a contract if it determines at any time that representatives of the Borrower or of a beneficiary of the loan were engaged in corrupt, fraudulent, collusive or coercive practices during the selection process or the execution of the contract, without the Borrower having taken timely and appropriate action satisfactory to the Bank to remedy the situation.
- (d) will sanction a Consultant, including declaring the Consultant ineligible, either indefinitely or for a stated period of time, to be awarded a Bank-financed contract if at any time determines that the Consultant has, directly of through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for, or in executing, a Bank-financed contract; and
- (e) will have the right to require that, in contracts financed by the Bank, a provision be included requiring Consultants to permit the Bank to inspect their accounts and records and other documents relating to the submission of proposals and contract performance, and have them audited by auditors appointed by the Bank.
- 1.8 Consultants, their Sub-Consultants, and their associates shall not be under a declaration of ineligibility for corrupt and fraudulent practices issued by the Bank in accordance with the above para. 1.7. Furthermore, the Consultants shall be aware of the provisions on fraud and corruption stated in the specific clauses in the General Conditions of Contract.
- 1.9 Consultants shall furnish information on commissions and gratuities, if any, paid or to be paid to agents relating to this proposal and during execution of the assignment if the Consultant is awarded the Contract, as requested in the Financial Proposal submission form (Section 4).

#### Origin of Goods and Consulting Services

- 1.10 Goods supplied and Consulting Services provided under the Contract may originate from any country except if:
  - (i) as a matter of law or official regulation, the Borrower's country prohibits commercial relations with that country; or
  - (ii) by an act of compliance with a decision of the United nations Security Council taken under Chapter VII of the Charter of the United Nations, the Borrower's Country

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prohibits any imports of goods from that country or any payments to persons or entities in that country.

## Only one Proposal

Shortlisted Consultants may only submit one proposal. If a Consultant submits or participates in more than one proposal, such proposals shall be disqualified. However, this does not limit the participation of the same Sub-Consultant, including individual experts, to more than one proposal.

### Proposal Validity

The Data Sheet indicates how long Consultants' Proposals must remain valid after the submission date. During this period, Consultants shall maintain the availability of Professional staff nominated in the Proposal. The Client will make its best effort to complete negotiations within this period. Should the need arise, however, the Client may request Consultants to extend the validity period of their proposals. Consultants who agree to such extension shall confirm that they maintain the availability of the Professional staff nominated in the Proposal, or in their confirmation of extension of validity of the Proposal, Consultants could submit new staff in replacement, who would be considered in the final evaluation for contract award. Consultants who do not agree have the right to refuse to extend the validity of their Proposals.

### **Eligibility of Sub-Consultants**

1.13 In case a shortlisted Consultant intends to associate with Consultants who have not been shortlisted and/or individual expert(s), such other Consultants and/or individual expert(s) shall be subject to the eligibility criteria set forth in the Guidelines.

# 2. Clarification and Amendment of RFP Documents

Consultants may request a clarification of any of the RFP documents up to the number of days indicated in the Data Sheet before the proposal submission date. Any request for clarification must be sent in writing, or by standard electronic means to the Client's address indicated in the Data Sheet. The Client will respond in writing, or by standard electronic means and will send written copies of the response (including an explanation of the query but without identifying the source of inquiry) to all Consultants. Should the Client deem it necessary to amend the RFP as a result of a clarification, it shall do so following the procedure under para. 2.2.

- At any time before the submission of Proposals, the Client may amend the RFP by issuing an addendum in writing or by standard electronic means. The addendum shall be sent to all Consultants and will be binding on them. Consultants shall acknowledge receipt of all amendments. To give Consultants reasonable time in which to take an amendment into account in their Proposals the Client may, if the amendment is substantial, extend the deadline for the submission of Proposals.
- 3. Preparation of Proposals
- The Proposal (see para. 1.2), as well as all related correspondence exchanged by the Consultants and the Client,

shall be written in the language (s) specified in the Data Sheet.

- 3.2 In preparing their Proposal, Consultants are expected to examine in detail the documents comprising the RFP. Material deficiencies in providing the information requested may result in rejection of a Proposal.
- 3.3 While preparing the Technical Proposal, Consultants must give particular attention to the following:
  - (a) If a shortlisted Consultant considers that it may enhance its expertise for the assignment by associating with other Consultants in a joint venture or sub-consultancy, it may associate with either (a) non-shortlisted Consultant(s), or (b) shortlisted Consultants if so indicated in the Data Sheet. A shortlisted Consultant must first obtain the approval of the Client if it wishes to enter into a joint venture with non-shortlisted or shortlisted Consultant(s). In case of association with non-shortlisted Consultant(s), the shortlisted Consultant shall act as association leader. In case of a joint venture, all partners shall be jointly and severally liable and shall indicate who will act as the leader of the joint venture.
  - (b) The estimated number of Professional staff-months or the budget for executing the assignment shall be shown in the Data Sheet, but not both. However, the Proposal shall be based on the number of Professional staffmonths or budget estimated by the Consultants.

For fixed-budget-based assignments, the available budget is given in the Data Sheet, and the Financial Proposal shall not exceed this budget, while the estimated number of Professional staff-months shall not be disclosed.

(c) Alternative professional staff shall not be proposed, and only one curriculum vitae (CV) may be submitted for each position.

Language

(d) Documents to be issued by the Consultants as part of this assignment must be in the language(s) specified in the Reference Paragraph 3.1 of the Data Sheet. If Reference Paragraph 3.1 indicates two languages, the language in which the proposal of the successful Consultant will be submitted shall govern for the purpose of interpretation. It is desirable that the firm's Personnel have a working knowledge of the Client's national language.

Technical Proposal Format and Content 3.4 Depending on the nature of the assignment, Consultants are required to submit a Full Technical Proposal (FTP), or a Simplified Technical Proposal (STP). The Data Sheet indicates the format of the Technical Proposal to be submitted.

Submission of the wrong type of Technical Proposal will result in the Proposal being deemed non-responsive. The Technical Proposal shall provide the information indicated in the following paras from (a) to (g) using the attached Standard Forms (Section 3). Paragraph (c) (ii) indicates the recommended number of pages for the description of the approach, methodology and work plan of the STP. A page is considered to be one printed side of A4 or letter size paper.

- For the FTP only: a brief description of the (a) (i) Consultants' organization and an outline of recent experience of the Consultants and, in the case of joint venture, for each partner, on assignments of a similar nature is required in Form TECH-2 of Section 3. For each assignment, the outline should indicate the names of Sub-Consultants/ Professional staff who participated, duration of the assignment, contract amount, and Consultant's involvement. Information should be provided only for those assignments for which the Consultant was legally contracted by the Client as a corporation or as one of the major firms within a joint venture. Assignments completed by individual Professional staff working privately or through other consulting firms cannot be claimed as the experience of the Consultant, or that of the Consultant's associates, but can be claimed by the Professional staff themselves in their CVs. Consultants should be prepared to substantiate the claimed experience if so requested by the Client.
  - (ii) For the STP the above information is not required and Form TECH-2 of Section 3 shall not be used.
- (b) (i) For the FTP only: comments and suggestions on the Terms of Reference including workable suggestions that could improve the quality/ effectiveness of the assignment; and on requirements for counterpart staff and facilities including: administrative support, office space, local transportation, equipment, data, etc. to be provided by the Client (Form TECH-3 of Section 3).
  - (ii) For the STP Form TECH-3 of Section 3 shall not be used; the above comments and suggestions, if any, should be incorporated into the description of the approach and methodology (refer to following subpara. 3.4 (c) (ii)).
- (c) (i) For the FTP, and STP: a description of the approach, methodology and work plan for performing the assignment covering the following subjects: technical approach and methodology, work plan, and organization and staffing schedule. Guidance on the content of this section of the Technical Proposals is provided under Form TECH-4 of Section 3. The

- work plan should be consistent with the Work Schedule (Form TECH-8 of Section 3) which will show in the form of a bar chart the timing proposed for each activity.
- (ii) For the STP only: the description of the approach, methodology and work plan should normally consist of 10 pages, including charts, diagrams, and comments and suggestions, if any, on Terms of Reference and counterpart staff and facilities.
- (d) The list of the proposed Professional staff team by area of expertise, the position that would be assigned to each staff team member, and their tasks (Form TECH-5 of Section 3).
- (e) Estimates of the staff input (staff-months of foreign and local professionals) needed to carry out the assignment (Form TECH-7 of Section 3). The staff-months input should be indicated separately for home office and field activities, and for foreign and local Professional staff.
- (f) CVs of the Professional staff signed by the staff themselves or by the authorized representative of the Professional Staff (Form TECH-6 of Section 3).
- (g) For the FTP only: a detailed description of the proposed methodology and staffing for training, if the Data Sheet specifies training as a specific component of the assignment.
- 3.5 The Technical Proposal shall not include any financial information. A Technical Proposal containing financial information may be declared non responsive.

### Financial Proposals

3.6 The Financial Proposal shall be prepared using the attached Standard Forms (Section 4). It shall list all costs associated with the assignment, including (a) remuneration for staff (foreign and local, in the field and at the Consultants' home office), and (b) reimbursable expenses indicated in the Data Sheet. If appropriate, these costs should be broken down by activity and, if appropriate, into foreign and local expenditures. All activities and items described in the Technical Proposal must be priced separately; activities and items described in the Technical Proposal but not priced, shall be assumed to be included in the prices of other activities or items.

**Taxes** 

3.7 The Consultant may be subject to local taxes (such as: value added or sales tax, social charges or income taxes on non resident Foreign Personnel, duties, fees, levies) on amounts payable by the Client under the Contract. The Client will state in the Data Sheet if the Consultant is subject to payment of any local taxes. Any such amounts shall not be included in the Financial Proposal as they will not be evaluated, but they will

- be discussed at contract negotiations, and applicable amounts will be included in the Contract.
- 3.8 Consultants may express the price of their services in a maximum of three freely convertible currencies, singly or in combination. The Client may require Consultants to state the portion of their price representing local cost in the national currency if so indicated in the Data Sheet.
- 3.9 Commissions and gratuities, if any, paid or to be paid by Consultants and related to the assignment will be listed in the Financial Proposal Form FIN-1 of Section 4.
- 4. Submission, Receipt, and Opening of Proposals
- 4.1 The original proposal (Technical Proposal and, if required, Financial Proposal; see para. 1.2) shall contain no interlineations or overwriting, except as necessary to correct errors made by the Consultants themselves. The person who signed the proposal must initial such corrections. Submission letters for both Technical and Financial Proposals should respectively be in the format of TECH-1 of Section 3, and FIN-1 of Section 4.
- 4.2 An authorized representative of the Consultants shall initial all pages of the original Technical and Financial Proposals. The authorization shall be in the form of a written power of attorney accompanying the Proposal or in any other form demonstrating that the representative has been dully authorized to sign. The signed Technical and Financial Proposals shall be marked "ORIGINAL".
- 4.3 The Technical Proposal shall be marked "ORIGINAL" or "COPY" as appropriate. The Technical Proposals shall be sent to the addresses referred to in para. 4.5 and in the number of copies indicated in the Data Sheet. All required copies of the Technical Proposal are to be made from the original. If there are discrepancies between the original and the copies of the Technical Proposal, the original governs.
- 4.4 The original and all copies of the Technical Proposal shall be placed in a sealed envelope clearly marked "TECHNICAL PROPOSAL" Similarly, the original Financial Proposal (if required under the selection method indicated in the Data Sheet) shall be placed in a sealed envelope clearly marked "FINANCIAL PROPOSAL" followed by the Loan/TA number and the name of the assignment, and with a warning "DO NOT OPEN WITH THE TECHNICAL PROPOSAL." The envelopes containing the Technical and Financial Proposals shall be placed into an outer envelope and sealed. This outer envelope shall bear the submission address, reference number and title of the Loan, and be clearly marked "Do Not Open, Except In Presence Of The OFFICIAL APPOINTED, BEFORE [insert the time and date of the submission deadline indicated in the Data Sheet]". The Client shall not be responsible for misplacement, losing or premature opening if the outer envelope is not sealed and/or marked as stipulated. This circumstance may be case for Proposal rejection. If the Financial Proposal is not submitted in a separate sealed envelope duly marked as indicated above, this will constitute grounds for declaring the Proposal

non-responsive.

- 4.5 The Proposals must be sent to the address/addresses indicated in the Data Sheet and received by the Client no later than the time and the date indicated in the Data Sheet, or any extension to this date in accordance with para. 2.2. Any proposal received by the Client after the deadline for submission shall be returned unopened.
- 4.6 The Client shall open the Technical Proposal immediately after the deadline for their submission. The envelopes with the Financial Proposal shall remain sealed and securely stored.

### 5. Proposal Evaluation

5.1 From the time the Proposals are opened to the time the Contract is awarded, the Consultants should not contact the Client on any matter related to its Technical and/or Financial Proposal. Any effort by Consultants to influence the Client in the examination, evaluation, ranking of Proposals, and recommendation for award of Contract may result in the rejection of the Consultants' Proposal.

Evaluators of Technical Proposals shall have no access to the Financial Proposals until the technical evaluation is concluded and the Bank issues its "no objection".

### Evaluation of Technical Proposals

5.2 The evaluation committee shall evaluate the Technical Proposals on the basis of their responsiveness to the Terms of Reference, applying the evaluation criteria, subcriteria, and point system specified in the Data Sheet. Each responsive Proposal will be given a technical score (St). A Proposal shall be rejected at this stage if it does not respond to important aspects of the RFP, and particularly the Terms of Reference or if it fails to achieve the minimum technical score indicated in the Data Sheet.

### Financial Proposals for QBS

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Following the ranking of technical Proposals, when selection is based on quality only (QBS), the first ranked Consultant is invited to negotiate its proposal and the Contract in accordance with the instructions given under para. 6 of these Instructions

### Public Opening and Evaluation of Financial Proposals (only for QCBS, FBS, and LCS)

After the technical evaluation is completed and the Bank has issued its no objection (if applicable), the Client shall inform the Consultants who have submitted proposals the technical scores obtained by their Technical Proposals, and shall notify those Consultants whose Proposals did not meet the minimum qualifying mark or were considered non responsive to the RFP and TOR, that their Financial Proposals will be returned unopened after completing the selection process. The Client shall simultaneously notify in writing Consultants that have secured the minimum qualifying mark, the date, time and location for opening the Financial Proposals. The opening date should allow Consultants sufficient time to make arrangements for attending the opening. Consultants' attendance at the

opening of Financial Proposals is optional.

- 5.5 Financial Proposals shall be opened publicly in the presence of the Consultants' representatives who choose to attend. The name of the Consultants, and the technical scores of the Consultants shall be read aloud. The Financial Proposal of the Consultants who met the minimum qualifying mark will then be inspected to confirm that they have remained sealed and unopened. These Financial Proposals shall be then opened, and the total prices read aloud and recorded. Copy of the record shall be sent to all Consultants and the Bank.
- 5.6 The Evaluation Committee will correct any computational errors. When correcting computational errors, in case of discrepancy between a partial amount and the total amount, or between word and figures the formers will prevail. In addition to the above corrections, as indicated under para. 3.6, activities and items described in the Technical Proposal but not priced, shall be assumed to be included in the prices of other activities or items. In case an activity or line item is quantified in the Financial Proposal differently from the Technical Proposal, (i) if the Time-Based form of contract has been included in the RFP, the Evaluation Committee shall correct the quantification indicated in the Financial Proposal so as to make it consistent with that indicated in the Technical Proposal, apply the relevant unit price included in the Financial Proposal to the corrected quantity and correct the total Proposal cost, (ii) if the Lump-Sum form of contract has been included in the RFP, no corrections are applied to the Financial Proposal in this respect. Prices shall be converted to a single currency using the selling rates of exchange, source and date indicated in the Data Sheet.
- 5.7 In case of QCBS, the lowest evaluated Financial Proposal (Fm) will be given the maximum financial score (Sf) of 100 points. The financial scores (Sf) of the other Financial Proposals will be computed as indicated in the Data Sheet. Proposals will be ranked according to their combined technical (St) and financial (Sf) scores using the weights (T = the weight given to the Technical Proposal; P = the weight given to the Financial Proposal; T + P = 1) indicated in the Data Sheet: S = St x T% + Sf x P%. The firm achieving the highest combined technical and financial score will be invited for negotiations.
- 5.8 In the case of Fixed-Budget Selection, the Client will select the firm that submitted the highest ranked Technical Proposal within the budget. Proposals that exceed the indicated budget will be rejected. In the case of the Least-Cost Selection, the Client will select the lowest proposal among those that passed the minimum technical score. In both cases the evaluated proposal price according to para. 5.6 shall be considered, and the selected firm is invited for negotiations.

#### 6. Negotiations

6.1 Negotiations will be held at the date and address indicated in the Data Sheet. The invited Consultant will, as a pre-requisite for

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attendance at the negotiations, confirm availability of all Professional staff. Failure in satisfying such requirements may result in the Client proceeding to negotiate with the next-ranked Consultant. Representatives conducting negotiations on behalf of the Consultant must have written authority to negotiate and conclude a Contract.

### Technical negotiations

Negotiations will include a discussion of the Technical Proposal, the proposed technical approach and methodology, work plan, and organization and staffing, and any suggestions made by the Consultant to improve the Terms of Reference. The Client and the Consultants will finalize the Terms of Reference, staffing schedule, work schedule, logistics, and reporting. These documents will then be incorporated in the Contract as "Description of Services". Special attention will be paid to clearly defining the inputs and facilities required from the Client to ensure satisfactory implementation of the assignment. The Client shall prepare minutes of negotiations which will be signed by the Client and the Consultant.

### Financial negotiations

If applicable, it is the responsibility of the Consultant, before starting financial negotiations, to contact the local tax authorities to determine the local tax amount to be paid by the Consultant under the Contract. The financial negotiations will include a clarification (if any) of the firm's tax liability in the Client's country, and the manner in which it will be reflected in the Contract; and will reflect the agreed technical modifications in the cost of the services. In the cases of QCBS, Fixed-Budget Selection, and the Least-Cost Selection methods, unless there are exceptional reasons, the financial negotiations will involve neither the remuneration rates for staff nor other proposed unit rates. For other methods, Consultants will provide the Client with the information on remuneration rates described in the Appendix attached to Section 4 - Financial Proposal - Standard Forms of this RFP.

### Availability of Professional staff/experts

Having selected the Consultant on the basis of, among other things, an evaluation of proposed Professional staff, the Client expects to negotiate a Contract on the basis of the Professional staff named in the Proposal. Before contract negotiations, the Client will require assurances that the Professional staff will be actually available. The Client will not consider substitutions during contract negotiations unless both parties agree that undue delay in the selection process makes such substitution unavoidable or for reasons such as death or medical incapacity. If this is not the case and if it is established that Professional staff were offered in the proposal without confirming their availability, the Consultant may be disqualified. Any proposed substitute shall have equivalent or better qualifications and experience than the original candidate and be submitted by the Consultant within the period of time specified in the letter of invitation to negotiate.

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### **Conclusion of** the negotiations

Negotiations will conclude with a review of the draft Contract. To complete negotiations the Client and the Consultant will initial the agreed Contract. If negotiations fail, the Client will invite the Consultant whose Proposal received the second highest score to negotiate a Contract.

### 7. Award of Contract

- After completing negotiations the Client shall award the Contract to the selected Consultant, publish in UNDB on line and in the Development Gateway the award of the Contract, and promptly notify all Consultants who have submitted proposals. After Contract signature, the Client shall return the unopened Financial Proposals to the unsuccessful Consultants.
- 7.2 The Consultant is expected to commence the assignment on the date and at the location specified in the Data Sheet.

#### 8. Confidentiality

8.1 Information relating to evaluation of Proposals and recommendations concerning awards shall not be disclosed to the Consultants who submitted the Proposals or to other persons not officially concerned with the process, until the publication of the award of Contract. The undue use by any Consultant of confidential information related to the process may result in the rejection of its Proposal and may be subject to the provisions of the Bank's antifraud and corruption policy.

### **Instructions to Consultants**

### **Data Sheet**

Paragraph Reference	
1.1	Name of the Client: The State Road Administration
	Method of selection: QCBS
1.2	Financial Proposal to be submitted together with Technical Proposal:  Yes X No
	Name of the assignment is: Roads Feasibility and Detailed Design Studies
1.3	A pre-proposal conference will be held: Yes X No
	May 05, 2010; 10:00 a.m.
	State Road Administration MD-2004, Bucuriei str. 12 A, Chisinau, Republic of Moldova
	The Client's representative is: <u>Anatolii Usatii</u> Address: <u>MD-2004</u> , <u>Bucuriei str. 12 A, Chisinau, Republic of Moldova</u>
	Telephone: (+373 22) 22 11 14 Facsimile: (+373 22) 74 12 19
	E-mail: usatii@asd.md
1.4	The Client will provide the following inputs and facilities: As per detailed description in the Terms of Reference attached hereto.
1.6.1 (a)	The Client envisages the need for continuity for downstream work:  Yes No <u>X</u>
1.12	Proposals must remain valid 90 days after the submission date, i.e. until: August 24, 2010
2.1	Clarifications may be requested not later than 15 days before the submission date.
	The address for requesting clarifications is: Address: MD-2004, Bucuriei str. 12 A, Chisinau, Republic of Moldova Telephone: (+373 22) 22 11 14 Facsimile: (+373 22) 74 12 19 E-mail: usatii@asd.md

3.1	Proposals shall be submitted in the following language: <b>English</b>	
3.3 (a)	Shortlisted Consultants may associate with other shortlisted Consultants No <u>x</u>	tants: Yes
3.3 (b)	The estimated number of professional staff-months required for the is <u>60.</u>	assignment
3.4	The format of the Technical Proposal to be submitted is: $\mathbf{FTP} \underline{\mathbf{X}}$ , or $\mathbf{STP} \underline{}}$ .	
3.4 (g)	Training is a specific component of this assignment: Yes No X	
3.6	(i) Cost of printing and dispatching of the reports to be produ Services.	uced for the
3.7	Amounts payable by the Client to the Consultant under the contract subject to local taxation: Yes No _x_	to be
3.8	Consultant to state local cost in the national currency: YesNo	) <u>X</u>
4.3	Consultant must submit the original and <u>3 (three)</u> copies of the Technoposal, and the original of the Financial Proposal.	hnical
4.5	The Proposal submission address is:  MD-2004, Bucuriei str. 12 A, Chisinau, Republic of Moldova  Proposals must be submitted no later than the following date and tin  May 26, 2010, 10:00 a.m. (local time)	ne:
5.2 (a)	Criteria, sub-criteria, and point system for the evaluation of Full Tec Proposals are:	chnical
		<u>Points</u>
	(i) Specific experience of the Consultants relevant to the assignment:	5
	(ii) Adequacy of the proposed methodology and work plan in responding to the Terms of Reference:	
	a) Technical approach and methodology	10
	<ul><li>b) Work plan</li><li>c) Organization and staffing</li></ul>	15 20
	Total points for criterion (ii):	45
	(iii) Key professional staff qualifications and competence for the assignment:	
	a) Team Leader	12
	<ul><li>b) Senior Highway/Pavement Engineer</li><li>c) Structural Engineer</li></ul>	9 5
	d) Geotechnical Engineer	5
	e) Transport Economist	9
1	f) Environmental Expert	5

	g) Social Expert 5
	Total points for criterion (iii): 50
	The number of points to be assigned to each of the above positions or disciplines shall be determined considering the following three subcriteria and relevant percentage weights:
	1) General qualifications 2) Adequacy for the assignment 30% 3) Experience in region and language Total weight: 100%
	The minimum technical score St required to pass is: <u>80</u> Points [eighty]
5.2 (b)	Not applicable.
5.6	The single currency for price conversions is: Moldovan Leu  The source of official selling rates is: National Bank of Moldova  The data of evaluation rates is: Data of financial prepagal energing
	The date of exchange rates is: <b><u>Date of financial proposal opening</u></b>
5.7	The formula for determining the financial scores is the following: $\mathbf{Sf} = 100 \times \mathbf{Fm} / \mathbf{F}$ , in which Sf is the financial score, Fm is the lowest price and F the price of the proposal under consideration.
	The weights given to the Technical (Tp) and Financial (Fp) Proposals are: $Tp=0.8$ , and $Fp=0.2$
6.1	Expected date and address for contract negotiations:
	July 07, 2010 MD-2004, Bucuriei str. 12 A, Chisinau, Republic of Moldova
7.2	Expected date for commencement of consulting services  August 02, 2010  at: Chisinau, Republic of Moldova.

### Section 3. Technical Proposal - Standard Forms

[Comments in brackets [ ] provide guidance to the shortlisted Consultants for the preparation of their Technical Proposals; they should not appear on the Technical Proposals to be submitted.]

Refer to Reference Paragraph 3.4 of the Data Sheet for format of Technical Proposal to be submitted, and paragraph 3.4 of Section 2 of the RFP for Standard Forms required and number of pages recommended.

TECH-1	Technical Proposal Submission Form
TECH-2	Consultant's Organization and Experience A Consultant's Organization B Consultant's Experience
TECH-3	Comments or Suggestions on the Terms of Reference and on Counterpart Staff and Facilities to be Provided by the Client  A On the Terms of Reference  B On the Counterpart Staff and Facilities
TECH-4	Description of the Approach, Methodology and Work Plan for Performing the Assignment
TECH-5	Team Composition and Task Assignments
TECH-6	Curriculum Vitae (CV) for Proposed Professional Staff
TECH-7	Staffing Schedule
TECH-8	Work Schedule

FORM TECH-1 TECHNICAL PROPOSAL SUBMISSION FORM

[Location, Date]

To: [Name and address of Client]

Dear Sirs:

We, the undersigned, offer to provide the consulting services for [*Insert title of assignment*] in accordance with your Request for Proposal dated [*Insert Date*] and our Proposal. We are hereby submitting our Proposal, which includes this Technical Proposal, and a Financial Proposal sealed under a separate envelope<sup>1</sup>.

We are submitting our Proposal in association with: [Insert a list with full name and address of each associated Consultant]<sup>2</sup>

We hereby declare that all the information and statements made in this Proposal are true and accept that any misinterpretation contained in it may lead to our disqualification.

If negotiations are held during the period of validity of the Proposal, i.e., before the date indicated in Paragraph Reference 1.12 of the Data Sheet, we undertake to negotiate on the basis of the proposed staff. Our Proposal is binding upon us and subject to the modifications resulting from Contract negotiations.

We undertake, if our Proposal is accepted, to initiate the consulting services related to the assignment not later than the date indicated in Paragraph Reference 7.2 of the Data Sheet.

We understand you are not bound to accept any Proposal you receive.

We remain.

Yours sincerely,

Authorized Signature [In full and initials]:	
Name and Title of Signatory:	
Name of Firm:	
A 11 .	

<sup>1 [</sup>In case Paragraph Reference 1.2 of the Data Sheet requires to submit a Technical Proposal only, replace this sentence with: "We are hereby submitting our Proposal, which includes this Technical Proposal only."]

<sup>2 [</sup>Delete in case no association is foreseen.]

### FORM TECH-2 CONSULTANT'S ORGANIZATION AND EXPERIENCE

### A - Consultant's Organization

[Provide here a brief (two pages) description of the background and organization of your firm/entity and each associate for this assignment.]

### **B** - Consultant's Experience

[Using the format below, provide information on each assignment for which your firm, and each associate for this assignment, was legally contracted either individually as a corporate entity or as one of the major companies within an association, for carrying out consulting services similar to the ones requested under this assignment. Use 20 pages.]

Assignment name:	Approx. value of the contract (in current US\$ or Euro):
Country: Location within country:	Duration of assignment (months):
Name of Client:	Total $N^{\underline{o}}$ of staff-months of the assignment:
Address:	Approx. value of the services provided by your firm under the contract (in current US\$ or Euro):
Start date (month/year): Completion date (month/year):	$N^{2}$ of professional staff-months provided by associated Consultants:
Name of associated Consultants, if any:	Name of senior professional staff of your firm involved and functions performed (indicate most significant profiles such as Project Director/Coordinator, Team Leader):
Narrative description of Project:	
Description of actual services provided by your staff w	vithin the assignment:

Firm's Name:

# FORM TECH-3 COMMENTS AND SUGGESTIONS ON THE TERMS OF REFERENCE AND ON COUNTERPART STAFF AND FACILITIES TO BE PROVIDED BY THE CLIENT

#### A - On the Terms of Reference

[Present and justify here any modifications or improvement to the Terms of Reference you are proposing to improve performance in carrying out the assignment (such as deleting some activity you consider unnecessary, or adding another, or proposing a different phasing of the activities). Such suggestions should be concise and to the point, and incorporated in your Proposal.]

### **B** - On Counterpart Staff and Facilities

[Comment here on counterpart staff and facilities to be provided by the Client according to Paragraph Reference 1.4 of the Data Sheet including: administrative support, office space, local transportation, equipment, data, etc.]

# FORM TECH-4 DESCRIPTION OF APPROACH, METHODOLOGY AND WORK PLAN FOR PERFORMING THE ASSIGNMENT

[Technical approach, methodology and work plan are key components of the Technical Proposal. You are suggested to present your Technical Proposal (50 pages, inclusive of charts and diagrams) divided into the following three chapters:

- a) Technical Approach and Methodology,
- b) Work Plan, and
- c) Organization and Staffing,
- a) <u>Technical Approach and Methodology.</u> In this chapter you should explain your understanding of the objectives of the assignment, approach to the services, methodology for carrying out the activities and obtaining the expected output, and the degree of detail of such output. You should highlight the problems being addressed and their importance, and explain the technical approach you would adopt to address them. You should also explain the methodologies you propose to adopt and highlight the compatibility of those methodologies with the proposed approach.
- b) Work Plan. In this chapter you should propose the main activities of the assignment, their content and duration, phasing and interrelations, milestones (including interim approvals by the Client), and delivery dates of the reports. The proposed work plan should be consistent with the technical approach and methodology, showing understanding of the TOR and ability to translate them into a feasible working plan. A list of the final documents, including reports, drawings, and tables to be delivered as final output, should be included here. The work plan should be consistent with the Work Schedule of Form TECH-8.
- c) <u>Organization and Staffing.</u> In this chapter you should propose the structure and composition of your team. You should list the main disciplines of the assignment, the key expert responsible, and proposed technical and support staff.]

### FORM TECH-5 TEAM COMPOSITION AND TASK ASSIGNMENTS

essional Staff		1		
Name of Staff	Firm	Area of Expertise	Position Assigned	Task Assigned

# FORM TECH-6 CURRICULUM VITAE (CV) FOR PROPOSED PROFESSIONAL STAFF

1.	Proposed Position [only one candidate shall be nominated for each position]:
2.	Name of Firm [Insert name of firm proposing the staff]:
3.	Name of Staff [Insert full name]:
4.	Date of Birth:Nationality:
5.	<b>Education</b> [Indicate college/university and other specialized education of staff member, giving names of institutions, degrees obtained, and dates of obtainment]:
6.	Membership of Professional Associations:
7.	Other Training [Indicate significant training since degrees under 5 - Education were obtained]:
8.	Countries of Work Experience: [List countries where staff has worked in the last ten years]:
9.	Languages [For each language indicate proficiency: good, fair, or poor in speaking, reading, and writing]
10	<b>Employment Record</b> [Starting with present position, list in reverse order every employment held by staff member since graduation, giving for each employment (see format here below): dates of employment, name of employing organization, positions held.]:
Fro	om [Year]: To [Year]:
En	nployer:
Pos	sitions held:

### 11. Detailed Tasks Assigned

[List all tasks to be performed under this assignment]

# 12. Work Undertaken that Best Illustrates Capability to Handle the Tasks Assigned

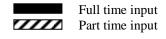
[Among the assignments in which the staff has been involved, indicate the following information for those assignments that best illustrate staff capability to handle the tasks listed under point 11.]

	Name of assignment or project:
	Year:
	Location:
	Client:
	Main project features:
	Positions held:
	Activities performed:
	est of my knowledge and belief, this CV correctly describes myself, my aderstand that any wilful misstatement described herein may lead to my d.
-	Date:
[Signature of staff member or authorized	ed representative of the staff]  Day/Month/Year
Full name of authorized represer	ntative:

### FORM TECH-7 STAFFING SCHEDULE<sup>1</sup>

N°	Nome of Choff		Staff input (in the form of a bar chart) <sup>2</sup> Total staff-month input														
IN "	Name of Staff	1	2	3	4	5	6	7	8	9	10	11	12	n	Home	Field <sup>3</sup>	Total
Fore	ign																
1		[Home]														$\times\!\!\times\!\!\times\!\!\times$	
1		[Field]													XXXX		
2						 				 					:XXXX		
3																XXXXX	
															**************************************	68888°	
															<b>*******</b>		
n				<del> </del>		 				 	<b></b>				:XXXXX	***************************************	
											Subto	tal			WYYYY)		
Loca	1																
1		[Home]														<b>XXXX</b>	
1		[Field]													KXXXXX		
2						 						_			       	XXXXXX	
												-				XXXXX	
															XXXX	XXXXX	
n															XXXXX		
											Subto	tal			NXXXXX	KXXXXX	<u> </u>
											Total				KXXXXX	$\partial \mathcal{W} \partial \mathcal{W}$	

- For Professional Staff the input should be indicated individually; for Support Staff it should be indicated by category (e.g.: draftsmen, clerical staff, etc.).
- Months are counted from the start of the assignment. For each staff indicate separately staff input for home and field work.
- 3 Field work means work carried out at a place other than the Consultant's home office.



### FORM TECH-8 WORK SCHEDULE

N°	1	Months <sup>2</sup>					2							
IN.	<b>Activity</b> <sup>1</sup>	1	2	3	4	5	6	7	8	9	10	11	12	n
1														
2														
3														
4														
5														
n														

Indicate all main activities of the assignment, including delivery of reports (e.g.: inception, interim, and final reports), and other benchmarks such as Client approvals. For phased assignments indicate activities, delivery of reports, and benchmarks separately for each phase.

<sup>2</sup> Duration of activities shall be indicated in the form of a bar chart.

### Section 4. Financial Proposal - Standard Forms

[Comments in brackets [ ] provide guidance to the shortlisted Consultants for the preparation of their Financial Proposals; they should not appear on the Financial Proposals to be submitted.]

Financial Proposal Standard Forms shall be used for the preparation of the Financial Proposal according to the instructions provided under para. 3.6 of Section 2. Such Forms are to be used whichever is the selection method indicated in para. 4 of the Letter of Invitation.

[The Appendix "Financial Negotiations - Breakdown of Remuneration Rates" is to be only used for financial negotiations when Quality-Based Selection, Selection Based on Qualifications, or Single-Source Selection method is adopted, according to the indications provided under para. 6.3 of Section 2.]

FIN-1 Financial Proposal Submission Form

FIN-2 Summary of Costs

FIN-3 Breakdown of Costs by Activity

FIN-4 Breakdown of Remuneration

FIN-5 Reimbursable expenses

Appendix: Financial Negotiations - Breakdown of Remuneration Rates

#### FORM FIN-1 FINANCIAL PROPOSAL SUBMISSION FORM

Locanon, Daie	[L	ocation,	Date
---------------	----	----------	------

To: [Name and address of Client]

Dear Sirs:

We, the undersigned, offer to provide the consulting services for [Insert title of assignment] in accordance with your Request for Proposal dated [Insert Date] and our Technical Proposal. Our attached Financial Proposal is for the sum of [Insert amount(s) in words and figures<sup>1</sup>]. This amount is exclusive of the local taxes, which shall be identified during negotiations and shall be added to the above amount.

Our Financial Proposal shall be binding upon us subject to the modifications resulting from Contract negotiations, up to expiration of the validity period of the Proposal, i.e. before the date indicated in Paragraph Reference 1.12 of the Data Sheet.

Commissions and gratuities paid or to be paid by us to agents relating to this Proposal and Contract execution, if we are awarded the Contract, are listed below<sup>2</sup>:

Name and Address of Agents	Amount and Currencyor Gratuity	Purpose of Commission
		<u>-</u> -
We understand you ar	re not bound to accept any Propos	– al you receive.
We remain,		
Yours sincerely,		
Authorized Signature	[In full and initials]:	
Name and Title of Sig	gnatory:	
Name of Firm:		
Address:		

<sup>1</sup> Amounts must coincide with the ones indicated under Total Cost of Financial proposal in Form FIN-2.

<sup>2</sup> If applicable, replace this paragraph with: "No commissions or gratuities have been or are to paid by us to agents relating to this Proposal and Contract execution."

### FORM FIN-2 SUMMARY OF COSTS

	Costs			
Item	[Indicate Foreign Currency # 1] <sup>1</sup>	[Indicate Foreign Currency # 2] <sup>1</sup>	[Indicate Foreign Currency # 3] <sup>1</sup>	[Indicate Local Currency]
Total Costs of Financial Proposal <sup>2</sup>				

<sup>1</sup> Indicate between brackets the name of the foreign currency. Maximum of three currencies; use as many columns as needed, and delete the others.

<sup>2</sup> Indicate the total costs, net of local taxes, to be paid by the Client in each currency. Such total costs must coincide with the sum of the relevant Subtotals indicated in all Forms FIN-3 provided with the Proposal.

### FORM FIN-3 BREAKDOWN OF COSTS BY ACTIVITY<sup>1</sup>

<b>Group of Activities (Phase):</b> <sup>2</sup>	Description: <sup>3</sup>				
Cost component	Costs				
	[Indicate Foreign Currency # 1] <sup>4</sup>	[Indicate Foreign Currency # 2] <sup>4</sup>	[Indicate Foreign Currency # 3] <sup>4</sup>	[Indicate Local Currency]	
Remuneration <sup>5</sup>					
Reimbursable Expenses <sup>5</sup>					
Subtotals					

- Names of activities (phase) should be the same as, or correspond to the ones indicated in the second column of Form TECH-8.
- 3 Short description of the activities whose cost breakdown is provided in this Form.
- 4 Indicate between brackets the name of the foreign currency. Use the same columns and currencies of Form FIN-2.
- 5 For each currency, Remuneration and Reimbursable Expenses must respectively coincide with relevant Total Costs indicated in Forms FIN-4, and FIN-5.

Form FIN-3 shall be filled at least for the whole assignment. In case some of the activities require different modes of billing and payment (e.g.: the assignment is phased, and each phase has a different payment schedule), the Consultant shall fill a separate Form FIN-3 for each group of activities. For each currency, the sum of the relevant Subtotals of all Forms FIN-3 provided must coincide with the Total Costs of Financial Proposal indicated in Form FIN-2.

## FORM FIN-4 BREAKDOWN OF REMUNERATION<sup>1</sup>

(This Form FIN-4 shall only be used when the Lump-Sum Form of Contract has been included in the RFP. Information to be provided in this Form shall only be used to establish payments to the Consultant for possible additional services requested by the Client)

Foreign Staff    [Home]   [Field]	Name <sup>2</sup>	Position <sup>3</sup>	Staff-month Rate <sup>4</sup>			
[Home] [Field]  Local Staff  [Home] [Field]	Foreign Staff					
Local Staff  [Field]  [Field]			[Home]			
[Home]			[Field]			
[Home]						
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[Home]						
[Home]	Local Staff	<u></u>	I			
[Field]		1	[Hama]			
			[Field]			
			[Trette]			
		+				

- 1 Form FIN-4 shall be filled in for the same Professional and Support Staff listed in Form TECH-7.
- 2 Professional Staff should be indicated individually; Support Staff should be indicated per category (e.g.: draftsmen, clerical staff).
- 3 Positions of the Professional Staff shall coincide with the ones indicated in Form TECH-5.
- 4 Indicate separately staff-month rate and currency for home and field work.

## FORM FIN-5 BREAKDOWN OF REIMBURSABLE EXPENSES

(This Form FIN-5 shall only be used when the Lump-Sum Form of Contract has been included in the RFP. Information to be provided in this Form shall only be used to establish payments to the Consultant for possible additional services requested by the Client)

N°	Description <sup>1</sup>	Unit	Unit Cost <sup>2</sup>
	Per diem allowances	Day	
	International flights <sup>3</sup>	Trip	
	Miscellaneous travel expenses	Trip	
	Communication costs between [Insert place] and [Insert place]		
	Drafting, reproduction of reports		
	Equipment, instruments, materials, supplies, etc.		
	Shipment of personal effects	Trip	
	Use of computers, software		
	Laboratory tests.		
	Subcontracts		
	Local transportation costs		
	Office rent, clerical assistance		
	Training of the Client's personnel <sup>4</sup>		

- 1 Delete items that are not applicable or add other items according to Paragraph Reference 3.6 of the Data Sheet.
- 2 Indicate unit cost and currency.
- 3 Indicate route of each flight, and if the trip is one- or two-ways.
- 4 Only if the training is a major component of the assignment, defined as such in the TOR.

## Section 5. Terms of Reference

# Consultancy Services for the Roads Feasibility and Detailed Design Studies

#### 1. BACKGROUND

#### 1.1. GENERAL

The Government of Moldova, represented by the Ministry of Transport and Road Infrastructure (MTRI), is implementing a **Road Sector Program Support Project** (the **Project**) financed by the European Bank for Reconstruction and Development (EBRD), European Investment Bank (EIB), the International Development Association (IDA / World Bank) and the Commission of European Communities (EC). The project is in direct support of the Government's overall Road Sector Program. The contracts under the Project are financed through separate financing agreements signed between the Government of Moldova on one side, and IDA, EBRD, EIB and EC (the IFIs) on the other.

#### 1.2. OBJECTIVE OF THE PROJECT

The development objective of the Project is to *reduce road transport costs for road users* in Moldova, by improving the condition and quality of its road network and the way it is managed. This project objective is being achieved by:

- a. *Road Network Recovery Component:* Rehabilitation of about 200 km of main roads and thereby reducing road user costs in the short term.
- b. *Institutional Strengthening Component:* Improving the capacity of the SRA to manage effectively the road network under its responsibility, and to carry out road maintenance, rehabilitation, and investment programs in an efficient and transparent manner. This should lead to a reduction of road user costs in the longer term.

The project has two components. The first component focuses on physical road rehabilitation. The second component will support the implementation of various institutional and other measures included in the Action Plan of the Land Transport Infrastructure Strategy for 2008-2017, approve by the Government of Moldova Decision #85 dated February 01, 2008.

Component 1: Road Network Recovery consists of physical road works and of consulting and other services directly related to those works, such as feasibility studies (technical and economic), detailed engineering design, preparation of bidding documents and supervision of works. This component will absorb about 90 percent of project resources. The type of works to be carried out through the project can be characterized as localized repair, periodic maintenance and rehabilitation.

Component 2: Institutional Support. This component aims at strengthening the Government's capacity to manage and maintain the network of National roads. It will provide various types of support to the Government towards the implementation of institutional, legal and other measures included in the Land Transport Infrastructure Strategy Action Plan. The most important activities will be (i) the creation of a reliable financing mechanism for road maintenance; (ii) the strengthening of SRA's capacity to efficiently manage and maintain the roads under its responsibility and to manage investment programs for road rehabilitation; and (iii) the implementation of a system designed to curb the circulation of overloaded trucks. Other activities may be included, depending on the availability of resources under the project. The

component will most likely consist of advisory services to be provided by specialized local and foreign consultants (technical, institutional and legal), training and the purchase of some equipment.

#### 1.3. PROJECT IMPLEMENTATION

The Project is being implemented by the State Road Administration (SRA) under the general supervision and responsibility of the MTRI. SRA's responsibilities include procurement, financial management, contract management, project and program monitoring and evaluation, and reporting. To strengthen SRA's capacity to carry out those functions, local specialists have been recruited under consultant contracts, through a competitive selection process. These are in the areas of procurement, financial management and environment management.

#### 2. OBJECTIVE OF THE STUDY

The objectives of the services are:

- (i) to carry out engineering, economic, environmental and social studies for the proposed roads improvement for 611 km, and
- (ii) to carry out detailed engineering design for up to 812 km.

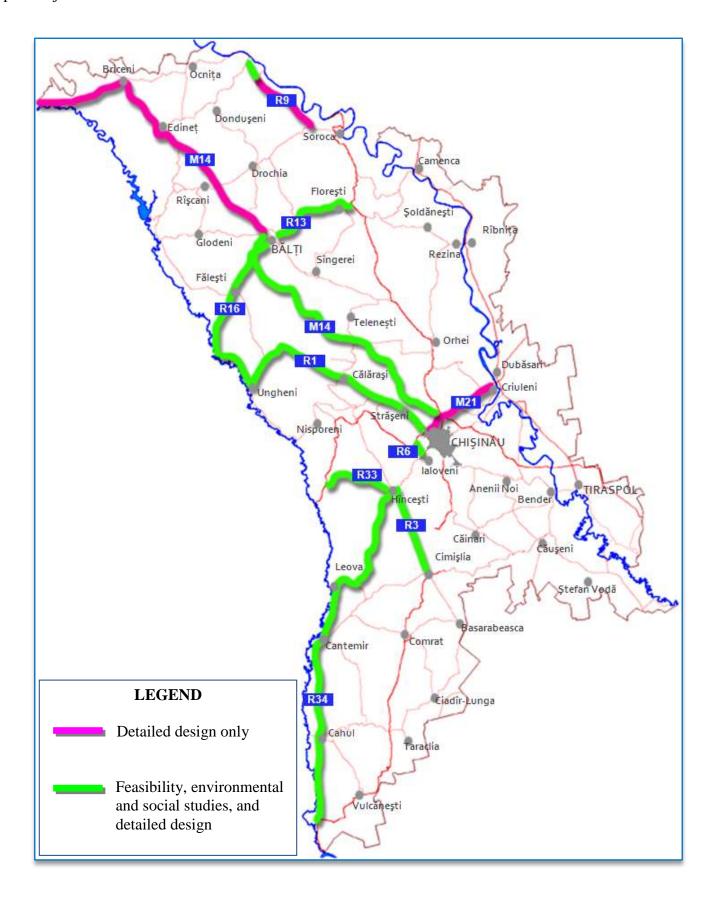
The study will be implemented in two phases. The objective of the 1st phase is to carry out a detailed economic analysis comparing different types of improvements of the road sections proposed for the project. Upon approval by MTRI/SRA, the 2nd phase of the study will include the preliminary and detailed designs. The Consultant shall also prepare environmental and social mitigation plans in accordance with the World Bank safeguard policies.

Road sections to be included in the studies are shown in the Table 1 below, and the locations are shown in Map 1 that follows the table. General information about the roads under the project is provided in Annex 2.

Table 1.

Nr	Road/road section	Length, km		
Feasibility, environmental and social studies, and detailed design				
1	R1 Chisinau-Ungheni-Sculeni-Romanian border	120.1		
2	R16 Balti-Falesti-Sculeni	59.6		
3	R13 Balti-Soldanesti-Ribnita (section Balti-Gura Camencii)	39.9		
4	M14 Brest-Briceni-Chisinau-Tiraspol-Odesa (section Balti - Chisinau)	131.6		
5	R33 Hincesti-Lapusna-M1	37.2		
6	R34 Hincesti-Leova-Cahul-Slobozia Mare	167.6		
7	R3 Chisinau-Hincesti-Cimislia-Basarabeasca (section Hincesti-Cimislia)	39.4		
8	R6 M1-Ialoveni (section M1-R3)	6.0		
9	R9 Soroca-Arionesti- Moghiliov Podolski (section Arionesti-Otaci)	9.6		
Detailed design only				
10	M14 Brest-Briceni-Chisinau-Tiraspol-Odesa (section Balti - Criva)	133.3		
11	M21 Chisinau-Dubasari-Poltava	36.5		
12	R9 Soroca-Arionesti- Moghiliov Podolski (section Drochia junction-Arionesti)	31.1		

Map 1. Project road sections.



For the road sections M14 Brest-Briceni-Chisinau-Tiraspol-Odesa (section Balti - Criva), R9 Soroca-Arionesti- Moghiliov Podolski (section Drochia junction-Arionesti), and M21 Chisinau-Dubasari-Poltava the following studies will be available by July 2010:

- Feasibility Study,
- Environmental and Social Impact Assessment,

These studies are funded by Millennium Challenge Corporation (MCC) and in preparation by MCC's Consultants. For these road sections the Consultant will be required to carry out studies necessary for detailed design, prepare detailed designs and technical specifications only.

#### 3. SCOPE OF SERVICES

The Consultant is expected to conduct the following activities using current and "best practice" methods:

#### PHASE I

- Pre-design studies<sup>1</sup> including traffic, hydrological, geotechnical, seismic, alignment, pavement, structural, drainage and safety studies.
- Preparation of an environmental and social impact assessment (ESIA) and environmental management plan (EMP) for each road in accordance with local environmental requirements and with the World Bank (WB) safeguard policies<sup>2</sup>
- An initial assessment of resettlement and land acquisition requirements and preparation
  of a Resettlement Policy Framework (RSF) in accordance with World Bank Operational
  Policy 4.12 on Involuntary Resettlement.
- Financial and Economical analyses.

Phase I work will be completed only on the following roads:

- **R1** *Chisinau-Ungheni-Sculeni-Romanian border* (120.1 km)
- **R16** Balti-Falesti-Sculeni (59.6 km)
- **R13** *Balti-Soldanesti-Ribnita* (*section Balti-Gura Camencii*) (39.9 km)
- M14 Brest-Briceni-Chisinau-Tiraspol-Odesa (section Balti Chisinau) (131.6 km)
- **R33** *Hincesti-Lapusna-M1*(37.2 km)
- **R34** *Hincesti-Leova-Cahul-Slobozia Mare* (167.6 km)
- R3 Chisinau-Hincesti-Cimislia-Basarabeasca (section Hincesti-Cimislia) (39.4 km)
- **R6** *M1-Ialoveni* (*section M1-R3*) (6.0 km)
- **R9** Soroca-Arionesti- Moghiliov Podolski (section Arionesti-Otaci) (9.6 km)

#### PHASE II

- Field surveys, investigations and tests.
- Preparation of preliminary designs, estimates of quantities and cost.
- Preparation of detailed design.
- Preparation of Drawings, Specifications, and Design Report.

Phase II work will be completed for:

• the roads (or road sections) that are demonstrated to be feasible from the Phase I studies;

<sup>&</sup>lt;sup>1</sup> One study shall be prepared for each proposed road.

<sup>&</sup>lt;sup>2</sup> A full listing of the World Bank's safeguards policies can be accessed at: http://lnweb18.worldbank.org/ESSD/sdvext.nsf/52ByDocName/SafeguardPolicies

- the roads for which feasibility studies, preliminary design and environmental/social studies are funded by MCC and prepared by MCC's Consultants:
  - o **M14** Brest-Briceni-Chisinau-Tiraspol-Odesa (section Balti Criva) (133.3 km)
  - o **M21** Chisinau-Dubasari-Poltava (36.5 km)
  - o **R9** Soroca-Arionesti- Moghiliov Podolski (section Drochia junction-Arionesti) (31.1 km)

#### 3.1. PHASE 1 OF THE STUDY

#### 3.1.1. Desk study

The Consultant will review the existing data: studied, maps, reports and surveys.

#### 3.1.2. Initial Road Reconnaissance

The Consultant will conduct an initial reconnaissance of the existing roads alignment to make an overall assessment of the terrain, hydro-geological conditions, existing pavement, drainage facilities, bridges and other structures, and environmental and socio-economic conditions.

#### 3.1.3. Traffic Analysis and Forecasts

The Consultant will carry out a program of traffic counts to adequately establish the baseline condition for travel demand forecasts, determine the likely volume of traffic that will divert from the existing roads to the rehabilitated routes, and collect data on heavy vehicle characteristics and axle loads. The Consultant shall provide a methodology report, for the Client acceptance. It is expected that this program may be of the following character, but the actual program must be proposed and accepted:

- Seven-day classified traffic counts, with a minimum daily continuous twelve hours count, including at least one 24-hour count, at approximately 10-15 locations on Project road sections previously agreed to with the Client, in order to provide sufficient data for a proper evaluation of the existing volume of traffic on existing roads.
- Origin-destination (OD) surveys over two consecutive days at selected traffic count locations within the same period as the above traffic counts, such locations to be approved by the Client as adequate to capture both diverted domestic and diverted international traffic.
- The traffic surveys shall be done within a period of two to three weeks so as to minimize variations in the data.

The analysis must be based on the following categories of traffic:

- passenger cars;
- light commercial vehicles (up to 3 tons);
- heavy commercial vehicles (distinguishing between 2-axle, 3-axle and multi-axle);
- mini buses (up to 13 passengers);
- medium size buses (up to 30 passengers);
- large size buses;
- motorcycles; and
- non-motorized traffic.

The traffic evaluation should distinguish domestic and international traffic and should consider the degree of vehicle overloading for the purpose of estimating Equivalent Standard Axle Loads (ESALs). Average traffic speeds will be estimated by means of sampling time-flow relationship. SRA information on traffic will be available to evaluate old traffic trends<sup>3</sup>.

Traffic counting equipment and staff will be provided by the Consultant. The Consultant must prepare a plan and schedule resources accordingly.

Traffic should be projected annually for a 20-year period commencing in 2011 and trends should be evaluated for different development scenarios. Low, medium and high growth forecasts should be prepared and the justification for growth rate assumptions provided. All the forecasts should take into account the current state of external trade between neighboring and other countries.

#### 3.1.4. Hydro-Geological, Geotechnical and Seismic Studies

The Consultant shall assess the geo-morphological and hydro-geological characteristics along the Project roads, identify potential critical areas in terms of soil erosion, slope failure, other geo-hazards and seismic risks, and determine the requirements and costs of appropriate slope stabilization and erosion protection measures. The Consultant shall also identify areas where the cost of such mitigation measures would be prohibitive, and where the risk of occasional road closures should be accepted.

Other objectives of the geotechnical studies include the identification of sources of construction materials for sub-base, base course and asphalt and concrete mixtures, and the evaluation of geotechnical characteristics at the location of proposed new bridges and other major structures. Where new bridges or other major structures are proposed, the Consultant shall review existing geotechnical data in order to evaluate bridge foundation designs, methodology and costs. If there is significant concern over reliability of data and sensitivity of the alignment selection or costs to variation in those data, the Consultant shall propose further exploration and sampling.

#### 3.1.5. Alignment Studies

The Project roads are expected to follow the existing road alignments, with the possible exception of limited realignments to improve geometric characteristics, avoid areas subject to severe soil erosion or unstable slopes, avoid sensitive areas that might be affected, and bypass densely populated settlements.

The Consultant will employ whatever information-gathering technology is appropriate to recommend the best alignment for the Project in the most efficient way. Methodologies may include, but not be limited to use of existing MTRI and SRA data, field surveys, and aerial/satellite survey data and maps from any reliable source.

It is expected that initial horizontal alignment analysis will be accomplished at a scale of 1:10,000. The final level of analysis, including evaluation of environmental impacts and geohazards and cost estimating, will be accomplished at a scale of 1:2,000. The Consultant may use direct topographical survey or aerial photography.

The Consultant will conduct a field survey, including verification of the available geological/geotechnical data by sampling survey, and record topographical information, structural and drainage information, and pertinent environmental features. Cross sections of existing roads will be recorded at as many locations as required to perform a cost assessment of

<sup>&</sup>lt;sup>3</sup> Presently there are 16 automatic fix counters functioning on the national network, including 9 PEEK ADR 2000 counters and 7 PEEK ADR 1000 counters. Yearly daily average intensity data accumulated by automatic and manual census posts for 2009 will be presented by the State Road Administration.

rehabilitation, but the intervals shall generally be no less than 500 m. Sufficient centre-line levels will be taken to accurately define the existing profile of the road.

The proposed road alignment must take due account of the irrigation channels and drainage structures and any other (aerial and/or underground) utilities, if any, which could interfere with the proposed solution. It should also consider potential resettlement and land acquisition requirements, as well as other pertinent environmental and/or social issues that are identified as part of the EIA or EMP (see Section 3.1.10 below).

The Consultant should pay special attention to any existing road sections in residential areas where limited realignments may be designed to by-pass these areas as far as this is feasible, and should carefully assess the costs and benefits (to include environmental and social costs and benefits) of such realignments. Contacts and liaison with municipal authorities and affected population or their representatives may be required, and should be conducted through SRA. Any realignment recommendation should be founded on sound technical, financial, social and environmental bases.

#### 3.1.6. Pavement Studies

A 20-year design life will be adopted for pavement design. The Consultant will prepare projections of ESAL during the pavement's design life using the results of traffic forecasts. It is intended to incorporate parts of the existing pavement into the rehabilitated road when practicable, so an evaluation sufficient to establish feasibility and costs must be undertaken to assess the bearing capacity of the existing pavement. A limited amount of engineering investigation and testing may be necessary to substantiate visual inspection for feasibility purposes, and a deflection survey at appropriate selected locations may also be necessary.

Based on the preliminary pavement studies, the Consultant will propose optimum pavement design options for the various project road sections and will estimate their costs.

#### 3.1.7. Structural Studies

Where the Consultant proposes to incorporate existing bridges, retaining walls and other structures in a proposed alignment, the Consultant will conduct sufficient investigation and assess the condition of those structures to determine the extent of necessary repairs, widening or replacement, if applicable, and to estimate their costs. Seismic design requirements in the Project area must be taken into consideration for new structures. A list of existing bridges is included in Annex 2.

#### 3.1.8. Drainage Studies

The Consultant will conduct an overall assessment of the condition and adequacy of existing drainage facilities, including box and pipe culverts, to determine the extent of necessary repair or replacement, and the requirement for additional facilities, including subsurface drainage, and to estimate their costs.

#### 3.1.9. Road Safety and Disability Access Studies

The Consultant will consider road safety and disability access requirements and their costs. Special consideration shall be given to safety in crossing through populated areas and at schools along the roads. The Consultant must design and evaluate traffic separation elements such as curbs, barriers, walkways and special road signalization to provide separation for local traffic, bicycles (and/or other forms of non-motorized vehicles, if applicable) and pedestrians. Pedestrian safety, particularly the safety of school children, is a priority concern. The use of the road surface as a pedestrian walkway is to be avoided. It should be noted that the goal is to provide access,

but with vehicular and pedestrian safety. Baseline estimates of traffic accident and fatality rates shall be used to determine areas where safety has been a problem in the past.

In considering this aspect, the Consultant shall take due account of the principles prescribed in the technical annex of EU Directive EC/96/2008 on Road Safety.

#### 3.1.10. Environmental and Social Components

Depending on the improvement selected and its impact on the surrounding environment, the consultant will prepare an appropriate environmental assessment. If the improvement is classified as Category B, which is likely as the rehabilitation works will be within the right-of-way as far as possible, the Consultant will only be required to prepare an Environmental Mitigation Plan. Otherwise, an Environmental and Impact Assessment (EIA) and a Social Impact Assessment (SIA) may be required.

While the Consultant will be responsible for the overall preparation of the environmental and social assessment reports (e.g., the EMP or EIA), he will do so in close coordination with SRA. The Consultant will conduct the public consultations with groups affected by the proposed project, and with local NGOs, on the environmental and social aspects of the proposed project. The draft reports should be available in a public place accessible to affected groups and local NGOs. Two consultations will be required, firstly at the scoping stage before starting the assessments, and secondly after the draft assessments have been completed.

The Consultant will prepare relevant materials to be provided to affected groups in a timely manner prior to consultation and in a form and language (Romanian and English, as well as a summary in Russian) that is understandable and accessible to the groups being consulted. A record should be maintained by the Consultant of the public consultation. These records should indicate: (a) any means other than consultations (e.g. surveys) that have been used to seek the views of affected stakeholders, (b) the date and location of consultation meetings, (c) a list of attendees, their affiliation and address/ telephone number, and (d) summary minutes. Annex 1 provides details of the environmental and social requirements.

#### 3.1.11. Cost estimates

The estimated cost of the proposed works will be the significant factor both in the economic evaluation and in budget planning. The estimated unit costs for works, maintenance, structures, and roadside facilities should be explicitly reported by the Consultant along with the source of the information. The Consultant shall grant special attention to the fluctuating price of materials such as oil and bitumen and should allow for this in their estimation. The method for dealing with such fluctuations should be described in relevant reports. Allowances and contingencies for supervision, traffic management, and any other possible costs shall be considered.

Economic costs should also include estimates of the cost of mitigation measures and costs of relocation/resettlement compensation stipulated in the EIA/EMP and SIA reports. As part of the resettlement costs, the Consultant should calculate the value of land and property, if any, that would need to be acquired. The cost of utility relocation must also be considered in the analysis.

#### 3.1.12. Economic Evaluation

The Consultant will estimate the economic rate of return (ERR) and economic net present value (NPV) for various rehabilitation alternatives by means of cost comparison between the project options and the "do nothing" scenario, using a standard cost/benefit methodology and a 20-year evaluation period beginning from the start of construction of civil works. Costs and benefits shall be expressed in constant prices (base year prices).

When rehabilitation of existing road sections is evaluated, the Consultant will take into account that the existing earthworks, drainage structures, bridges and pavement should be incorporated as

far as possible into the rehabilitated facility. Any temporary road diversions shall also be included in the evaluation.

The Consultant shall consider, for every option: (i) the capital cost broken down per year of doing the investment for each type of improvement for each section; (ii) the road user costs (including vehicle operating costs) and the cost of maintaining (routine and periodic maintenance) the road per year throughout a 20-year analysis period; and (iii) the total life cost that sums up the two previous items. For each section, the life costs of all options will be compared to a "Do nothing" scenario which should correspond to minimum routine maintenance costs. For this purpose, use of the HDM-4 model or similar will be required.

The estimate of future benefits should principally rely on vehicle operating costs (VOCs), travel time and road accident cost savings.

- The average VOC in each alternative will be estimated using the HDM-4 method, or other methods if deemed more appropriate. If the road under consideration is diverting traffic from another road, any savings in VOC and time due to reduced congestion on this other road should be factored into the benefits. As for the traffic forecast, all the steps that lead to the VOC shall be mentioned by the Consultant and the calculations briefly detailed;
- Travel time costs will be calculated using the value of time (VOT). The VOT estimation will be derived, at least, from the GDP per capita, GDP per capita growth, an adequate occupancy rate of each vehicle. Final estimations will be broken down per type of vehicle, and steps to lead toward the result will be clearly mentioned. Bases for each assumption should also be specified; and
- Savings from decrease in road accidents shall be derived from the value of fatalities and
  injuries in Moldova, an estimated road accident rate growth and an assessment of the
  benefits of road improvement in terms of reduction of road accidents in similar countries
  or in Moldova if data are available.

All assumptions and sources for this calculation, including IRI, traffic volume, and travel time should be specified in the study. In all cases, the Consultant must submit the spreadsheet or files containing primary data and assumptions used, as well as the spreadsheets used to calculate the ERR, to the SRA.

The Consultant will carry out sensitivity analyses (+/- 10% and +/- 20%) on the parameters that are estimated with the greatest uncertainty, e.g., traffic forecasts and cost estimates. The Consultant will calculate the switching values of critical parameters. In addition, the ERR must be calculated for three scenarios with respect to the status of internal and international border controls and the degree to which vehicles can pass borders reliably and expeditiously. Consultants should model the extent to which these affect the traffic counts, types of vehicles using the roads, and types of trips made (under the HDM framework). These scenarios and related assumptions must be specified clearly, including the basis for assumptions used and rationale for the scenarios chosen. One scenario should be the status quo with respect to the border crossings.

The Consultant will determine the Net Present Value using a 12% discount rate.

#### 3.1.13. Phase I deliverables.

The Consultant will have completed the first phase of the task when:

- (i) the comparative table of possible improvements with relevant information has been compiled;
- (ii) the optimal alternative has been selected, upon approval of SRA and the World Bank, and rationale for such choice has been disclosed; and
- (iii) the category of the improvement, in terms of environmental impact, has been agreed upon with the World Bank. Annex 1 determines what is needed in terms of environmental and social mitigation reports.

The Consultant will proceed to prepare the preliminary and detailed designs and technical specifications, after receiving the approval of the SRA. In cases where the Consultant proposes design and construction standards which are different from those currently used in Moldova, he shall provide a separate report to explain his reasons.

#### 3.2. PHASE 2 OF THE STUDY

The objective of the preliminary design is to propose design concept and determine approximate quantities for the works to enable the Consultant to prepare a cost estimate.

The objective of the final design is to produce construction designs for the Project. These documents shall be prepared separately for each road. The final designs should achieve the optimum combination of rehabilitation costs and road serviceability, making use of modern design methods and requirements while minimizing resettlement and enhancing road safety. The end product should have a life of 20 years or more and be maintainable at reasonable costs and with locally available technology. The design and documentation work should adopt current "best practice" principles.

The final design must reflect the findings of the Environmental and Social Assessments (EIA & SIA), the Resettlement Policy Framework (RPF) and, if required, a Resettlement Action Plan (RAP). The design must also take account of the results of the State Ecological Expertise (SEE) if such SEE has been required based on the Ministry of Environment's review of the EIA (or EMP).

The packaging of works contracts will be decided when Phase 2 commences.

#### 3.2.1. Preliminary designs and estimates of quantities and costs

Geometric and geotechnical surveys of the existing road will establish its salvage value and what has to be done to achieve the defined standards of the rehabilitated facility.

General design standards will have been proposed at Inception Stage. These standards and general parameters for each of the road sections will be confirmed with the SRA.

Other international standards will be proposed for any issues not covered by the national standards and comments made on any areas where European Standards may require more stringent parameters. Recommendations will be made to the final design parameters, and should take into account current practice in Moldova.

The Consultant will undertake a preliminary design based on the data that was provided or obtained from the field studies. This preliminary design should be sufficient to determine approximate quantities for the works to enable the Consultant to prepare a cost estimate. The Consultant may propose improvements to the routing, or the realignment of any sections of the

roads under study. Sufficient data must be collected to prove the Consultant's technical, environmental and economic conclusions for any realignment have been taken into consideration.

Special attention shall be given to the actual presence or potential possibilities of erosion or sedimentation processes that may jeopardize the capacity of the structures to perform as designed. The remedial or preventive measures shall be evaluated by the Consultant and their costs included in the general costs estimates.

Those sections where the use of the existing road is favored or essential will require a geometric and structural review with explanations of the alternative solutions for pavement type, bridge and drainage works. Typical cross sections will be prepared for each particular road section with variable geometric and structural characteristics.

The Consultant shall ensure that due attention is paid to road-side and sub-soil drainage as well as to safety, and that the quantities and costs for these have been taken into account in the estimate of construction costs. In addition, the work quantities and costs resulting from the EIA/EMP and SIA must also be taken into account. The economic analysis will require cost estimates appropriate to the common sections which are accepted by the SRA.

The construction costs should be based on realistic unit prices derived from ongoing or recently completed road construction and rehabilitation works in Moldova by international and local contractors. Project costs must include provisions for the relocation of any services, mitigation of social and environmental impacts, maintenance costs during the Project's 20-year design life, a physical contingency sum based on perceived risk, and a price contingency sum.

Preliminary designs and costs will not be required for the roads where feasibility studies and preliminary design have been carried out by MCC's Consultants including:

- o **M14** Brest-Briceni-Chisinau-Tiraspol-Odesa (section Balti Criva) (133.3 km)
- o **M21** Chisinau-Dubasari-Poltava (36.5 km)
- o **R9** Soroca-Arionesti- Moghiliov Podolski (section Drochia junction-Arionesti) (31.1 km)

#### 3.2.2. Field Surveys

Field surveys, investigations and tests should include, but not be limited to, the ones described below.

## 3.2.2.1. Topographic Surveys

Based on the most recent existing aerial photographs, the Consultant will carry out a topographical survey at a scale of 1:1,000 covering the entire project alignment. The width of the corridor is generally expected to be within the existing Right of Way (ROW), but may need to extend further for realignments and where design considerations may require, such as for areas of slope instability, drainage, and other design requirements.

The Consultant shall carry out a topographic survey along the road alignment, with cross-sections taken at sufficiently frequent intervals to provide adequate detail for construction drawings and for quantity estimates. Any cross-sections taken shall extend to a sufficient width to include the edges of the ROW and the intercept between any cut or embankment slope and the adjacent ground. In unstable and potentially unstable areas, the cross-sections will cover as much of the slope area as is necessary.

The topographic surveys shall cover all necessary points of embankment and excavation slopes, road pavement and shoulders, junctions, roadside drainage, drainage structures, bridges, railway crossings, retaining walls, river training structures, safety features, road signs, utilities, trees, boundary fences and entrances to roadside properties, watercourses and any other feature that would affect the design of road rehabilitation or new construction.

The Consultant shall establish a comprehensive primary and secondary survey control network along the road, related to WGS84 and National Control Survey stations. A inventory of properties adjacent to the existing roads or within the area of the corridor of new road sections shall also be undertaken.

The Consultant shall prepare Computer Aided Design (CAD) drawings of the completed ground survey.

#### 3.2.2.2. Geotechnical, Soils and Pavement Surveys

The Consultant will perform geological and geotechnical investigations, soil studies, and studies of foundations for structures. The geological studies shall be based on both photo interpretation and ground reconnaissance along the general alignment of the roads. The studies shall be complemented with existing geological and geotechnical data from previous studies and the execution of deep borings in critical or unstable areas. Recommendations on slope stability, excavation effects for the use of explosives, examination of exposed surfaces, identification of active and potentially active slide areas and proposal of solution alternatives shall also be addressed.

These studies will also include soils investigations for the purpose of detecting surfacing rocks, subterranean water, water table elevation, undesired material and unstable soil. Investigations shall continue until adequate and sufficient amount of information has been obtained to support the design of sub-base thickness, pavement thickness, drainage structures, bridges foundations, slopes, subdrains and borrow pits for road construction.

In order to determine the conditions of the soil beneath the existing road, the Consultant shall carry out sufficient investigations to ensure that the design is adequate. As a minimum for this purpose, hand borings will be performed along the length of the project roads, at a minimum of 1 hand borings per 5 kilometres and a minimum depth of 1.5 meters. Soil from the hand borings shall be visually classified on site, with further analysis conducted in the laboratory. If in any of the borings, the Consultant finds soft soil, peat, mud, or any other geotechnical problem, the corresponding exploration shall be executed to the depth and extent that is required.

The samples that are taken from manual borings will be subject to classification, sieve analysis, Atterberg Limits, natural water content, California Bearing Ratio (CBR) and other tests that the Consultant deems necessary.

For new or replacement bridges, explorations will be made by the drilling and sampling of subsoil or rock encountered, to determine the nature and extension of the different soil stratus and depth of the water table elevation. This information will be used to: a) calculate the load capacity and settlement characteristics of the soil in specific places and specific depths and b) obtain the properties of the different soil stratus that interact in the analysis of erosion at the base of the foundations when the riverbed is exposed to the effects of currents. It is anticipated that several boreholes will be required, depending on the size of the proposed bridge. Any such investigation shall be as extensive as required to provide an adequate design.

#### 3.2.2.3. Inspection of Bridges, Culverts and Other Structures

The Consultant shall undertake a systematic, detailed inspection and dimensioning of existing bridges, culverts, retaining walls, river training and other structures, including non-destructive concrete testing of bridges and other major structures, to determine the ability of the structures to support the established design loads.

#### 3.2.2.4. Hydrological, Hydraulic and Drainage Investigations

The Consultant shall investigate the hydraulic and drainage efficiency of existing bridges, culverts and road side drainage facilities. Investigations shall examine scour, erosion, drainage and flood characteristics along the road.

#### **Minor Drainage**

For the design of culverts and other minor elements, the Consultant may use the rational method with a return period of 25 years. For each basin of minor drainage, the following should be prepared as a minimum:

- Delineation of basin
- Rational formula to determine the hydrological flow.

Hydraulics for Minor Drainage

The Consultant will verify the condition and capacity of the existing drainage structures, and propose widening or repairs of the structure as necessary. The Consultant shall prepare designs using the hydrological studies. The Consultant will define locations and provide designs where it will be necessary to construct unlined ditches, lined ditches to avoid erosion, eliminate filtrations or control surface drainage that could adversely affect the road.

#### **Major Drainage**

The works on major drainage, box culverts and bridges, will be supported by rain intensity studies based on the time of concentration of the basin, with a return period of 50 years. The Consultant will define the drainage area and the erosion coefficient related to the type of soil of the zone, aiming at finding the flow that is passing through the crossing point.

The Consultant will delineate the drainage area of the basin by using topographic maps at a scale of 1:50,000. The drainage area will be divided in sub-basins to obtain Design Flows that are sufficiently precise to justify design conclusions. For each sub-basin, hydrological characteristics shall be determined, such as area, average slope, highest and lowest points, flow routes, form of the sub-basin and Design Flows.

#### **Hydraulics for Major Drainage**

The Consultant will define the maximum water flow that will pass in the crossings during the design period, the necessary freeboard between the maximum high water elevation and the super-structure, to allow the passage of floating objects. Current speed shall be defined, as will the pattern and type of flow and the backwater produced by the presence of obstacles or constructed pools.

Pertinent studies will be conducted in order to estimate the level of erosion in riverbeds due to the current. The Consultant shall recommend appropriate protection and/or rectification measures where necessary, taking particular care at bridge foundations.

#### **Longitudinal Drainage**

The Consultant shall define and design the roads in which it will be necessary to build ditches, counter ditches, gutters or erosion control structures.

#### **Subdrains**

Consultant shall indicate where subterranean water is detected and deemed potentially harmful for the road structure and shall design the necessary protection.

#### 3.2.3. Detailed Design

The detailed design shall be based on the preliminary design, shall conform to the design standards approved and adopted for the project, and shall incorporate the requirements of the EIA, EMP, SIA and the RPF or RAP that are developed for each Project road. Detailed design activities will include the following:

- geometric design;
- pavement design;
- drainage design;
- geotechnical design;
- bridge and structures design; and
- all other necessary designs.

Safety is a priority and the principles prescribed in the technical annex of EU Directive EC/96/2008 on Road Safety shall be applied to all relevant aspects of the design.

In addition to meeting the specific requirements of these TOR, all deliverables associated with the final design, drawings, and documents thereof shall meet all required rules and regulations in Moldova and shall be at a quality that meets or exceeds that of bidding documents funded by International Financial Institutions (IFIs) under international competitive bidding standards (ICB).

#### **Geometric Design**

The final design alignment will be based on the alignment developed during the preliminary design, with minor adjustments made to improve geometric characteristics, wherever practical. The final road profile will reflect the new pavement structure, embankment for drainage purposes in low lying areas, and minor geometric improvements for safety reasons. The road cross-section shall conform to the approved design standards, with the exception of areas where narrower roadway or shoulder widths would be justified on a cost basis or to avoid hill-side excavation that could exacerbate slope stability problems. Geometric design will also include the design of roadway intersections.

#### **Pavement Design**

Pavement rehabilitation is expected to be the major cost of the rehabilitation works. The Consultant shall employ suitable methods and considerations to ensure that designs are both adequate for the design life and cost-effective.

Pavement design shall consider the composition and strength of existing pavement and subgrade, forecast ESAL loads, and the use of natural or processed construction materials that are readily available. Wherever possible, material used for embankment construction on top of existing pavement shall be locally extracted sand/gravel or material excavated from road cuts, with characteristics and strength modulus equal to/or better than the existing pavement/sub-grade materials. In designing pavement layers, the contribution of existing sub-base and base course materials shall be maximized. Subject to Moldovan pavement design standards the Consultant shall perform pavement cost optimization analysis based on forecast ESAL loads for given road segments and pavement materials characteristics. The Consultant shall prepare a plan for systematic non-destructive evaluation of existing pavement strengths where considered necessary based on the Phase 1 findings using Benkelman Beam or other methodology acceptable to SRA. When agreed, the plan shall be put into effect. The results shall be applied to optimize the cost of pavement works. The Consultant shall select cost effective pavement design alternatives which are technically feasible for each road segment respectively.

#### **Drainage Design**

The Consultant shall determine the drainage areas and basins of water crossings (based on topographic maps, aerial photos and field inspections), study rainfall, water flow and flood characteristics, and determine the requirements for cross-drainage, based on appropriate return flood periods for each drainage area and type of structure. When existing culverts are in poor condition or are deemed to be inadequate, the design shall allow for replacements. Otherwise, the existing structures will be repaired. Designs must insure that every bridge, box culvert and culvert is able to support the established design loading.

Drainage design will also cover requirements for longitudinal drains, including lining of same if necessary, sub-surface drainage, energy-dissipation works to preserve the stability of slopes and pollution control measures.

#### **Geotechnical Design**

Geotechnical design will include the design of foundations for new bridges and structures, and the design of measures for stabilization and protection of unsafe slopes.

## **Bridge and Structures Design**

The design of remedial works to existing bridges will include all repairs necessary to render them safe and capable of supporting projected heavy loads. New bridges, if any, shall be designed for a 50-year flood and shall conform to the seismic design requirements for the project area.

## **Other Design Requirements**

Other items to be covered in the final design include safety measures (road markings, signs, safety barriers, speed bumps), access design, entrances to roadside properties, urban section features (such as sidewalks, gutters, storm sewers), utility relocation, bus bays and bus shelters, pedestrian crossings.

In sections, if any, where the existing ROW would not be sufficient to accommodate the Project roads, the Consultant shall prepare detailed ROW plans showing the road located on property maps, including a description of the parcel of land which is required to be acquired. The Consultant will be required to refine the design to minimize resettlement and land acquisition consistent with the principles of World Bank OP 4.12.

In addition, the design of special sites for axle load controls will be required. Locations for such sites as well as specifications for their design will be provided in due time by the SRA. It is expected that about 25 axle load control sites will be included for the design.

## 3.2.4. Preparation of Drawings, Specifications, Cost Estimates, and Design Report

The Consultant shall prepare drawings, technical specifications, quantity and cost estimates and design reports as required for the proper execution of the Project. Sample documents for the acceptance of the SRA will be included in the Consultant's Interim Detailed Design Report submittal.

#### **Drawings**

Final design drawings shall include the following:

- Location plan and vicinity map;
- Road plan at scales of 1:1,000 and profile drawings at scales 1:5000 (horizontal) and 1:500 (vertical);
- Roadside drainage plans and profiles, and drawings for subsurface drainage and pollution control measures, and sediment and erosion control plans;
- Road cross-sections at sufficient intervals for construction and quantities (frequency may be increased when necessary where characteristics change, and to provide adequate detail for construction);
- Typical road sections and details;
- Drawings for major culverts, including plans, elevations and typical cross-sections, including indication of upstream and downstream invert levels and other details, at appropriate scales;
- Bridge drawings, including general arrangement drawing (plan), elevation and typical cross-section through the bridge deck, all dimensioned accordingly. These drawings shall also show the extent of the works to be done at the bridge. Detailed drawings of the works at appropriate scales shall also be provided;
- Drawings for retaining walls, river training (also erosion and sedimentation control structures), and slope stabilization measures;
- Standard culvert and other drainage drawings and details;
- Standard drawings for junctions and property entrances;
- Standard drawings for bus bays and bus shelters;
- Standard drawings for pavement markings, signs, safety barriers and other road features;
- Schedules including quantity take-offs;
- ROW plans, if any;
- Utility relocation plans; and
- Other miscellaneous drawings.

#### **Technical Specifications**

The Technical Specifications shall be based on Moldovan standards except where none exist. The Consultant may also propose to use international standards where considered necessary, although Moldovan legislation should be taken into account in making any such recommendations. The Technical Specifications shall include lists and descriptions of work (pay) items to be executed.

#### **Quantity and Cost Estimates**

The Contractor shall prepare Bills of Quantities (BOQ) based on the various items of work to be executed in accordance with the Drawings and the Technical Specifications. The items in the BOQ shall correspond to the work (pay) items specified in the Technical Specifications.

The Consultant shall develop a confidential Unit Price Analysis for each work item and a Confidential Cost Estimate, for each work item, work category and for each project road as a whole.

The Unit Price Analysis shall be based on actual market price of the each item in Moldova including detailed analysis of the components of each BOQ item. Unit prices shall be classified into detailed direct costs (labor, materials and equipment), indirect costs (mobilization, on-site and general overheads, contractor's contingencies and profit) and taxes. Costs shall be disaggregated into local and foreign costs. The Consultant's Confidential Cost Estimate shall separately indicate all local taxes, tariffs, duties and other levies, because the Project may be funded by IFIs where exemptions to these may be applicable. Additionally to the detailed unit price analysis for each pay item in the BOQ, the Consultant shall provide comparative analysis of the computed unit price for this project with actual unit prices included in similar road projects in works contracts signed in Moldova in the last five (5) years.

#### **Estimates of Recurrent Maintenance Costs**

There is an ongoing dialogue between donors in the Sector and the Government of Moldova (GoM) to ensure adequate maintenance funding over the long term in the sector. Therefore, the Consultant shall determine the incremental costs (routine and periodic maintenance) for each proposed road for a 20-year period.

#### **Design Report and Other Documents**

The Consultant shall submit a Design Report providing a description of the Project and summarizing the final design analysis, including selection of design standards, field surveys and investigations, geometric design, pavement design, geotechnical design, drainage design, bridge and structures design, specifications, ROW acquisition and resettlement requirements, quantity estimates, and various calculations.

The Consultant will also submit a Soils and Materials Report, including location and characteristics of sources of borrow materials.

## 4. ESTIMATED ORGANIZATIONAL SETUP OF THE ASSIGNMENT, STAFFING AND SCHEDULE

#### 4.1. TEAM COMPOSITION

The Consultant is solely responsible for proposing an organizational setup of the assignment which, in his view, is appropriate for carrying out the assignment, fulfilling the Terms of Reference and producing the required outputs.

It is expected that the Consultant will provide a team of international experts for the key posts of the team that will carry out this work, and that these experts shall between them have significant experience (i) in team leadership, and in the fields of (ii) road engineering and design, (iii) transport economics, (iii) environmental and social impact assessment. The team can include professionals from Moldova and/or the sub-region in order to provide the local knowledge needed to carry out the assignment, and to ensure excellent communications and report writing, taking into account that the language of Government is Romanian. The Consultant's Team Leader is likely to work full-time in Moldova on the project due to the program.

In addition to the Key Personnel, additional technical and support staff will be needed to complete the assignment.

The numbers and man-months for all staff shall be included in the technical proposal and the costs in respect of these personnel are to be included in the financial proposal. There is a minimum of 60 person-months for Key personnel.

#### 4.2. MINIMAL TEAM REQUIRED

#### 4.2.1. Key Personnel.

The Consultant's team should comprise Key Personnel who between them have skills that include the following as a minimum:

- a) one Team Leader;
- b) one Senior Highway/Pavement Engineer;
- c) one Structural Engineer;
- d) one Geotechnical Engineer;
- e) one Transport Economist;
- f) one Environmental Expert;
- g) one Social Expert.

It is possible that some members of the Consultant's team may be able to cover more than one of the above specialities, but sufficient expertise will be necessary especially taking account the scope of work and timescale. Some positions may require more than one Key Expert in order to complete the tasks on time.

#### 4.2.2. Technical and Support Staff

The Consultants should identify all technical and support staff that will be needed for the timely implementation of the assignment. Due to considerable scope of survey and design tasks, it is especially important for the Consultant to identify the needs for field surveyors and designers. During the technical evaluation, special attention will be paid to the availability of such staff indicated in the Consultant's proposal. In this respect, the Consultant is expected to specify number and availability of all technical and support staff to demonstrate that objectives can be met. It is therefore a requirement to provide names of technical and support staff, although CVs will not be required.

#### 4.3. REQUIRED INPUTS

The Consultant shall provide Key Personnel having the capabilities described below. The job descriptions are indicative and the Consultants can propose distributions of tasks to match individual skills of the experts proposed.

In particular the Team Leader skills may be combined with one of the other specialisations.

#### (a) Team Leader;

Accredited University Degree - Engineering. Demonstrated experience managing at least 2 international projects of similar size and scope; including managing a team composed of foreign

and local technical experts; supervising and coordinating all aspects of the project technical, logistical and administrative work; ensuring good communication with the project partners. Field experience in Eastern Europe and knowledge of the Official State Language of Moldova or Russian language is an advantage. Overall experience should not be less than 20 years with over 7 years experience as a Team Leader.

## (b) Senior Highway/Pavement Engineer;

Accredited University Degree – Civil Engineering. Demonstrated experience working on several projects of similar size and scope. Hands–on experience and familiarity with latest technologies and methods for highway rehabilitation design and pavement materials requirements, especially pavement design methods. Field experience in Eastern Europe and knowledge of the Official State Language of Moldova or Russian language is an advantage. Overall experience should not be less than 12 years with over 6 years experience in a similar position.

## (c) Structural Engineer;

Accredited University Degree – Civil Engineering. Demonstrated experience working on projects of similar size and scope. Familiar with latest technologies and methods for bridge design and rehabilitation. Field experience in Eastern Europe, and knowledge of the Official State Language of Moldova or Russian language is an advantage. Overall experience should not be less than 12 years with over 6 years experience in a similar position.

## (d) Geotechnical Engineer;

Accredited University Degree – Civil Engineering. Demonstrated experience working on projects of similar size and scope. Familiar with international standards for geotechnical exploration and testing methods, bridge foundation design, and slope stabilization. Field experience in Eastern Europe and knowledge of the Official State Language of Moldova or Russian language is an advantage. Overall experience should not be less than 12 years with over 6 years experience in a similar position.

#### (e) Transport Economist;

Accredited University Advanced Degree – Transport Economics. Demonstrated experience in the economic and financial assessments of similar projects, including traffic forecasting and modeling. Field experience in Eastern Europe and knowledge of the Official State Language of Moldova or Russian language is an advantage. Overall experience should not be less than 12 years with over 6 years experience in a similar position.

#### (f) Environmental Expert;

Accredited University Degree – Environmental Studies, Environmental Engineering, or other relevant degree in natural, physical, and/or social sciences. Demonstrated experience managing the preparation of large scale environmental impact assessments for road projects in developing countries. Must demonstrate previous management of at least three environmental impact assessments of similar scope. Field experience in Eastern Europe and knowledge of the Official State Language of Moldova or Russian language is an advantage. Overall experience should not be less than 12 years with over 6 years experience in a similar position.

#### (g) Social Expert;

Accredited University Degree – Anthropology, Sociology, or other relevant degree in social sciences. Demonstrated experience conducting social impact assessment for road or similar transportation projects in developing countries. Specific expertise in gender, cultural resources, and/or human trafficking is desired. Must demonstrate previous work on at least three

environmental and social impact assessments, preferably of similar scope and including resettlement and land use change. Field experience in Eastern Europe, and knowledge of the Official State Language of Moldova or Russian language is an advantage. Overall experience should not be less than 12 years with over 6 years experience in a similar position.

#### 4.4. TIME FRAME

The assignment shall be finalized by June 30, 2011. In accordance with the procurement schedule it is planned that the contract will be signed by the end of July 2011 thus leaving eleven (11) months for the completion of the assignment. The Consultant is required to use this 11-month period for completing the tasks outlined above. When proposing the team members, the Consultant should ensure that all staff proposed are available at the times required in his programme for their input, and are aware of the durations of stays required in Moldova.

#### 5. REPORTING

#### 5.1. REPORTING REQUIREMENTS

Reports	Timeframe	Number of hard copies
1. <b>Inception Report</b> showing the Consultant's staff	within	2 copies in English;
mobilization schedule, time reporting systems, and communication procedures with the MTRI / SRA.	2 weeks *	3 copies in Romanian
2. Monthly Progress Reports showing the progress	within	2 copies in English;
during the reporting period with due regards to the	1 week on	3 copies in Romanian
differences (in any) between achieved and planned	month end	
results with the proposal of measures to compensate		
delays.		
3. Preliminary Feasibility Study	within 3	2 copies in English;
	months *	2 copies in Romanian
4. Final Feasibility Study (one for each road) and	within	4 copies in English;
comparative economic analysis with annexes	4 months *	4 copies in Romanian
presenting all the necessary background information.		
5. Environmental and Social mitigation reports (at	within	4 copies in English;
least EMP and, if proved to be required, EA and RAP)	4 months *	4 copies in Romanian
for the selected sections (one for each section)		
6. <b>Preliminary Design</b> for the improvement of the	within	4 copies in English;
selected sections	5 months *	4 copies in Romanian
7. <b>50% Design Report</b> containing the main findings	within 8	2 copies in English;
from the field surveys and studies, proposed technical	months *	3 copies in Romanian
solutions and other important issues for which the		
Consultant will need to seek SRA's approval		
8. <b>Final Detailed Design Report</b> for the improvement of	within 11	4 copies in English;
the selected sections including Technical	months *	4 copies in Romanian
Specifications and Bills of Quantities		

\* of the Effective Date

The deadlines for the submission of 50% Design Report and Final Detailed Design Report are indicated for road sections that will demonstrate to be feasible from the Phase I studies. The Consultants may propose alternative deadlines for the road sections where feasibility studies, preliminary design and environmental/social studies funded by MCC are available, although final versions of reports are to include all Project Roads.

#### 5.2. REPORT LANGUAGES AND PRESENTATION

All reports and documents must be presented in both English and Romanian languages. When finalized, hard copies in the amount indicated in the table above and an electronic copy of all required reports and documents shall be submitted in each language. The Drawings and data tables may be presented with bilingual text. Translations are to be submitted within 1 week of submission of the English version. Electronic versions of reports will use standard software, such as Microsoft WORD & EXCEL and Adobe Reader, and be consolidated in one file for ease of printing.

During the study the Consultant must keep the MTRI, the SRA and the World Bank informed of progress and of any issues arising, including any that may delay timely completion.

To expedite the review and comments, all reports will be sent electronically to SRA and the World Bank simultaneously. Reports and documents should be limited to 50 pages where possible, to avoid delays in translation and Client feed-back. Additional information may be included in annexes.

#### 6. SERVICES TO BE PROVIDED TO THE CONSULTANT

The Client will provide a Senior member of staff to supervise, monitor and co-ordinate all activities under the assignment. This will include ensuring that the Consultant will receive the necessary co-operation from stakeholders.

The Client shall assist the Consultant in obtaining entry visas and working permits (if needed) although the cost shall be borne by the Consultant.

The Client shall make available to the Consultant all information, agreements, documents etc. pertaining to the Consultant's mandate both in hard copy and where necessary in electronic copy. All documents so provided are, and will remain the property of the Client. The Consultant may not dispose of or otherwise make use of such documents without the prior written approval of the Client.

The Consultant shall be responsible for:

- Renting and maintaining a project office in Chisinau;
- Arranging its own living accommodation;
- Temporary accommodation upon arrival in Moldova;
- Per diems and general living expenses;
- Arranging for local transportation, including to and from SRA's premises;
- Duties and taxes payable under Moldavian law;
- Computer, printer, fax, telephone and other office equipment;
- Communications expenses;
- Translations (including written ones) related to the project.

#### 7. PAYMENT MODALITIES

The payment of the lump-sum fee will be as follows:

- 1. 20 % upon presentation of the **Inception report**
- 2. 20 % upon presentation of the Final Feasibility Study report
- 3. 10 % upon presentation of the Environmental and Social mitigation reports
- 4. 10 % upon presentation of the **Preliminary Design report**
- 5. 20 % upon presentation of the **50% Design report**
- 6. 20 % upon presentation of the **Final Detailed Design report**

The following approach will be used to calculate the payment due under the item 4 (preliminary design), 5 (50% design) and 6 (final detailed design):

- For the evaluation purposes the Consultants are required to provide in their Financial Proposals the costs for the development of preliminary, 50% design and final detailed design based on the assumption that all roads included in the project are feasible, i.e. cost for the preliminary design for the roads/road sections 1 to 9 as per table 1 of the present ToR, and cost for the 50% design and the final detailed design for the roads/road sections 1 to 12 as per table 1 of the present ToR.
- In the Financial Proposals, Form FIN-3 "Breakdown of Costs by Activity", the Consultants are required to provide, among others, the breakdown of the total costs for the preliminary, 50% design and final detailed design separately for each road. These breakdowns will be used to calculate payment amounts under pay-item 4 (preliminary design), pay-item5 (50% design) and pay-item 6 (final detailed design) in the event a particular road is demonstrated not to be feasible for rehabilitation, and therefore the preliminary, 50% design and final detailed design work is not required. In such a case, the cost of design work will not be included for payment under respective pay-item.
- If only a part of a road is demonstrated to be feasible from the Phase I studies, the cost for the preliminary, 50% design and final detailed design studies for such portion of road will be calculated by the following formula:

$$Cost_x = Cost_t \times \frac{Length_x}{Length_t}$$

*Cost<sub>x</sub>* - the cost for the preliminary/50% design/final detailed design study for a portion of road that is demonstrated to be feasible from the Phase I studies;

Cost<sub>t</sub> - the cost for the preliminary/50% design/final detailed design study for the entire road/road section, provided by the Consultant in the Form FIN-3;

- length of the corresponding portion of the road/road section that is demonstrated to be feasible from the Phase I studies;

 $Length_t$  - the total length

 $Length_x$ 

#### ANNEX 1

## Detailed Terms of References for Environmental Assessment & Environmental Management Plan

#### 1. Environmental Impact Assessments and Environmental analyses

Environmental impact assessments or environmental analyses (hereafter EIA for Category A Projects and EMP for Category B) will be prepared for each road in accordance with Moldovan environmental laws and standards, Operational Policy on Environmental Assessment (OP 4.01, January 1999); Operational Policy on Natural Habitats (OP 4.04, June 2001); Operational Policy Note on Management of Cultural Property in Bank Financed Projects (OPN 11.03, August 1999); and the Disclosure Handbook (December 2002), and applicable aspects of the environmental framework outlined in the 2007 Sectoral Environmental Assessment for the Moldova Road Sector<sup>4</sup>.

The objectives of each EIA and EMP will be to (i) assess baseline environmental and sociocultural conditions; (ii) identify potential adverse and positive impacts of the different alternatives considered, including direct, indirect, induced, and cumulative impacts; (iii) provide technical information and recommendations to help select and design the best alternative; (iv) prepare an Environmental Management Plan (EMP) which outlines specific mitigation measures (with quantification of associated costs) for preventing or minimizing adverse impacts, establishes an appropriate monitoring plan to measure the performance of mitigation measures during all phases of project implementation, and describes applicable institutional arrangements; and (v) prepare an HIV/AIDS awareness and prevention plan that will be incorporated into the EIAs.

The initial assessment of land acquisition and resettlement requirements and preparation of a Resettlement Policy Framework (RPF) will constitute a separate document<sup>5</sup>, but will be processed according to the same schedule as the EIAs or EMPs. The objective of the RPF is to conduct an initial assessment of potential resettlement and land acquisition requirements for each road, including an initial estimate of resettlement costs. The RPF must be consistent with the procedures of the World Bank Policy on Involuntary Resettlement, OP 4.12.

#### 2. EIA and EMP Requirements

Each EIA or EMP should be prepared in the context of the following:

- Applicable Moldova laws and standards, including but not limited to:
  - o Law on Environmental Protection (1993)
  - Law on Ecological Expertise and Environment Impact Assessment (1996)
  - Ministry of Transport and Road Industry (MTRI) 1997 "Guidelines concerning environmental protection within the roads and bridges design, construction, rehabilitation and maintenance activities"

<sup>4</sup> Ministry of Transport and Road Industry, Sectoral Environmental Assessment; Moldova Road Sector Program Support Project. (Melian R., February 2007).

<sup>&</sup>lt;sup>5</sup> To be clear, a separate EIA or EMP will be prepared for each road. However, only a single report covering all project roads will be prepared to document the initial resettlement assessment and draft Resettlement Policy Framework.

- Sectoral Environmental Assessment, Moldova Road Sector Program Support Project (Melian, 2007)
- World Bank OP 4.12 on Involuntary Resettlement; and
- World Bank EA Sourcebook, Technical Paper 376, Roads and the Environment Handbook.

Other pertinent national or international laws, standards, and guidelines should be identified in the Inception Report.

The Consultant will submit the EIA including EMP or the EMP for each road to the Ministry of Environment (MoE) for a ruling as to whether or not these documents fully meet Moldovan environmental requirements or if a State Environmental Expertise (SEE) (under Moldovan law) will also need to be carried out. In the latter case, the SEE would be conducted, free of charge, by the MoE. The Law on Ecological Expertise and Environmental Impact Assessment states (Article 21) that it "shall be conducted within up to 3 months from the date of submission of the documentation".

#### 3. Moldovan Requirements regarding EIA, EMP and SEE

The Moldovan Law on Ecological Expertise and Environmental Impact Assessment (1966) is the fundamental and most important piece of national environmental legislation in relation to the WB road project proposals. This law, like World Bank EA Sourcebook, Roads and the Environment Handbook and other international financial institutions, sets out a system of categorization of projects to determine the level of environmental investigation required. There are thirty-two types of projects requiring an EIA (i.e. Category 1) under the Moldovan Law on Ecological Expertise and Environmental Impact Assessment (1996). Regarding roads, EIAs are required for the "construction of auto highways and high-speed roads."

In addition to the requirement for environmental impact assessment, the Moldovan law also sets out the procedure for a state ecological expertise (SEE). An SEE, unlike an EIA or EMP, is carried out at the engineering design stage of a project and examines the compliance of the proposed project vis-a-vis national environmental norms and standards related to environmental health and safety; specifying particular environmental mitigation and safety measures to be taken during construction and operation. In this regard an SEE resembles the WB requirement for an EMP (following the preparation of an EIA or EMP).

Based on its review and approval of the EIA or EMP carried out on Category 1 and 2 projects, the MoE (specifically, the State Ecological Inspectorate, a subordinated agency of the MoE) determines whether or not an SEE is necessary. (In the past, Ministry of Ecology and Natural Resources (MENR) has approved the EMPs carried out on projects financed by international donors as meeting the requirement for an SEE.) The completion and approval of the SEE (or approved EMP substitute for an SEE) provides the official basis for initiating the detailed engineering design of the project.

## 4. Scope of Work

The Consultant will be responsible for gathering, reviewing and analyzing all necessary data and information, making maximum use of existing data that can be obtained from reliable sources. The Consultant shall characterize the extent and quality of available data and identify key-data gaps. Where missing information or data gaps exist, the Consultant shall identify these gaps in the Inception Report and describe the methodology and procedures that will be used to collect and evaluate additional data.

The work will include supporting public consultations and meetings with project stakeholders (affected population or their representatives; local, regional, and national authorities; representatives of the scientific community; NGOs; and others) in accordance with GOM requirements and WB EA Handbook. Consultant will provide technical assistance, information and will conduct the consultations. The SRA will be present at consultations and will monitories all the processes. Consultant will be the responsible party for the consultations and all formal contacts with the relevant authorities.

Each EIA and EMP will clearly distinguish construction-phase impacts from those expected during the operations and maintenance (O&M) phase of the project, and will outline the timing and frequency of proposed management, mitigation, and monitoring measures accordingly. As appropriate and feasible, remedial measures (prevention, avoidance and mitigation) will be incorporated into each road's final design.

#### Task 1 Description of the Proposed Activities

The Consultant shall provide a full description of the activities based on the results of the preliminary design and status of on-going design and engineering at the time the EIA or EMP is completed. At a minimum, the Project description will include: on-site works, elements (e.g., bridges), and components (e.g., rehabilitation, reconstruction, construction, operation and maintenance, and institutional development activities); locations; general layout; support facilities and services (e.g., construction camps); off-site works (e.g. quarries, borrow pits, spoil dumps, access roads); and staffing and implementation schedule.

#### Task 2 Study Methodology

The Consultant will describe the methodology that was implemented during the preparation of the EIA for the identification and evaluation of the environmental and social impacts. Furthermore, it is mandatory for the Consultant to present the bibliographical references that were used.

## Task 3 Description of Baseline Environment

The Consultant shall assemble, evaluate and present baseline data – measurable and quantifiable wherever possible - on the relevant environmental characteristics of the study area (including changes, which can be anticipated before commencement of the Project and expected trends if the Project is not implemented).

At a minimum, the baseline data shall include the following elements:

- Physical environment: geology; hydrogeology; geomorphology; geo- and seismic hazards and other natural disaster risks, including flooding and any risks related to climate change; topography; soils; climate and meteorology; surface and groundwater hydrology; water use; water quality; air quality; and landscape;
- Biological environment: flora; fauna; sensitive ecosystems (e.g., wetlands); protected areas, existing and planned; and significant natural sites;
- Socio-economic environment: present and projected population; employment; sources of income; land use (including current crops and cropping patterns, grazing, etc.); baseline gender assessment; land tenure and land titling; human settlements; health conditions, including occupational health and safety; economic activities (including agriculture, livestock, fisheries, commerce. industries, power stations, etc.); social services; infrastructures (transportation, communication, water and sanitation, power, etc.); developmental needs and priorities; present and projected

traffic patterns; prevalence of HIV/AIDS or other critical diseases; human trafficking or other sensitive social issues;

- Cultural environment: sites of archaeological, historic and/or cultural significance;
- Existing pollution: sources, levels, and impacts of existing air, water, soil, nature, and noise pollution in the study area, including pollution from waste disposal sites.

For Category B roads, the description of baseline conditions shall include at least a general analysis of the physical, biological, socio-economic, and cultural environment, with more focused and detailed descriptions of the most pertinent environmental and social characteristics of the road being studied. For Category A roads, the assessment of baseline conditions shall include a comprehensive analysis of the above factors.

#### Task 4 Environmental and Resettlement Legislation and Other Regulatory Considerations

The Consultant shall describe the pertinent regulations and standards governing: environmental quality, health and safety, protection of agricultural land and sensitive areas, protection of historical and cultural sites and land use control. This section should also cross-reference descriptions of current legislation for the acquisition of land and property that is a required part of the RPF. An assessment of the present Moldovan EIA and permitting requirements and procedures, as well as of the Government's capacity to handle these now and in the future should be included in each EIA and EMP.

The requirements for the initial resettlement assessment and Resettlement Policy Framework (RPF) are addressed in Section 6.

## Task 5 Determination of Potential Impacts

The Consultant shall identify and analyze all significant potential impacts, both biophysical and social, of the proposed activities. A clear distinction is to be made between positive and negative impacts; direct, indirect, and induced impacts; short-term (immediate) and long-term impacts; individual and cumulative<sup>6</sup> impacts; and avoidable and unavoidable impacts. Impacts are to be assessed for each alternative route and according to each phase (i.e., construction, operation, and maintenance) and to each main type of work (e.g., widening the existing road; bridge construction; establishment and use of construction camps; transport and storage of materials; borrow areas/quarrying; land acquisition; etc.). At a minimum, special attention should be given to:

- Impacts to water and soil resources;
- Impacts to air quality
- Noise impacts with special attention to sensitive receptors
- Impacts to local communities from project-induced development and improved access;
- Loss of agricultural land (from direct and induced impacts);
- Damage to, deterioration of or loss of ecologically sensitive areas and any impacts on rare, threatened, endangered or endemic species;
- Socio-economic impacts associated with land acquisition, resettlement, human trafficking, adverse effects on women or other differential impacts because of

<sup>&</sup>lt;sup>6</sup> Cumulative impacts take into account past, present, and potential future development in the zone of influence of the road.

gender and vulnerable and indigenous peoples, as well as the potential for increased disease transmission (including HIV/AIDS);

- Impacts related to employment
- Community health and safety impacts associated with increased traffic, including HIV/AIDS:
- Occupational health and safety during construction;
- Impacts to archaeological and/or cultural resources; and,
- Induced impacts
- Cumulative effects

The Consultant will pay particular attention to construction phase impacts, including.

- Noise, dust and other aspects of air quality as a result of construction equipment and movement of earth and excavations;
- Introduction of any migrant construction workers, construction camps, laydown areas, and hauling of materials and equipment.
- HIV/AIDS awareness and prevention plan, other health and safety-related measures for workers and those living close to construction areas;
- Provision for workers in remote areas to avoid disruption to habitat and to local populations;
- Sources of construction materials and transport impacts to the construction areas;
- Waste management on the construction site;
- Material and waste removal;
- Traffic management during construction.

## Task 6 Analysis of Alternatives

The Consultant shall describe briefly the main alternatives considered in the course of developing the proposed Project and indicate reasons for their rejection or selection. The Consultant shall compare these alternatives (including both alignment alternatives and geometric/pavement design alternatives) in terms of their potential environmental and social impacts, using appropriate evaluation and comparison methods for analyzing and presenting environmental data; in terms of capital and operating costs; results of cost/benefit evaluation; and institutional, training, and monitoring requirements.

All alternatives should be compared to the "without project" alternative. The need to maintain and rehabilitate the existing road is to be considered and analyzed in evaluating and comparing the merits of a new alignment. The Consultant shall, to the extent possible, quantify the costs and benefits of each alternative and incorporate the estimated cost of any associated mitigating measures.

## Task 7 Development of Environmental Management Plans (EMPs)

The development of an EMP should focus on four generic areas: (i) activities and impacts, (ii) mitigation measures, (iii) institutional strengthening and training, and (iv) implementation and monitoring, as outlined below. The degree of emphasis on each of these areas will depend on the specific needs of the Project as identified in EIA. The EMP should focus specifically on the preferred (proposed) alternative for the project, as indicated in the alternatives analysis completed under Task 6.

<u>Activities and Impacts</u>: Based on the results of the detailed impact assessment conducted under Task 5, brief describe the nature and extent of environmental impacts that are expected for each major activity of the Project, distinguishing between construction-related activities and O&M activities.

<u>Mitigation of Environmental Impact</u>: Recommend feasible and cost-effective measures to prevent or reduce significant negative impacts to acceptable levels. Estimate the impacts and costs of those measures. Consider compensation to affected parties for impacts, which cannot be mitigated. The plan should include proposed work programs, budget estimates, schedules, staffing and training requirements, and other necessary support services to implement the mitigating measures. Risk contingency plans in the event of natural disasters (flooding, earthquakes, hurricanes, etc.) should also be included.

<u>Implementation and Monitoring</u>: Prepare detailed institutional arrangements (responsibilities) for implementing and for monitoring implementation of mitigating measures and the impacts of the Project during construction and O&M. Include in the plan an estimate of capital and operating costs and a description of other inputs (such as training and institutional strengthening) needed to carry it out.

The EMP should, after presentation and analysis, be summarized in a table/matrix format, in accordance with WB requirements.

#### Task 8 Public Consultation and Disclosure

Community involvement is important in order to understand the nature and extent of potential impacts, especially socio-cultural impacts, and to assess the suitability and acceptability of mitigation measures. All formal consultations will be conducted by and be the responsibility of Consultant, in cooperation with SRA, the Consultant will provide also the technical assistance and information. The Consultant shall assist in this process, to ensure full public consultation in the EIA and EMP development and support timely approval and disclosure of documentation. All public consultation and disclosure activities shall be performed in a manner consistent with the requirements set forth in the WB, GoM Law on Ecological Expertise and EIA, and other relevant GoM requirements and guidelines. Additionally, consultation should:

- Be based on regular and systematic information about the Project;
- Be culturally and linguistically appropriate;
- Be gender-sensitive;
- Provide feedback on how the comments are taken into account in Project design and implementation; and
- Provide the outcomes of public consultation and disclosures in each EIA and EMP Report.

The EIAs and EMPs shall be accompanied by a consultative process that is both meaningful and participatory. Documents related to this process are expected to be made publicly available and be easily accessible.

First Step: Preparation of the draft EIA or EMP

Second Step: Consultation process on the draft EIA or EMP

Third Step: Preparation of the final EIA or EMP

Fourth Step: MoE review of the final EIA or EMP

#### 5. EIA and EMP Reports

Each EIA or EMP Report should be concise and focused on the most significant environmental and socio-cultural issues, including potential impacts associated with human trafficking, land acquisition and resettlement, and road safety, among others. The main text should focus on findings, conclusions and recommended actions, supported by summaries of the data collected and citations for any references used in interpreting those data. Detailed or unanalyzed data are not appropriate in the main text and should be presented in appendices or in a separate volume. The Consultant shall generally organize the Report according to the outline below, taking into account specific GoM requirements for topics to be covered:

- Executive Summary;
- Policy, Legal and Administrative Framework;
- Study Methodology
- Description of the Proposed Project;
- Results of Scoping;
- Baseline Data:
- Environmental Impacts and Mitigation;
- Social Impacts and Mitigation;
- Analysis of Alternatives;
- Environmental Management Plan;
- HIV/AIDS awareness and prevention plan
- Summary of Initial Resettlement Assessment and Policy Framework (see below);
- Public Consultation and Disclosure; and
- Appendices:
  - List of persons who prepared and contributed to the EIA or EMP
  - Records of coordination and consultation meetings and events
  - References
  - EIA or EMP TOR
  - Other, as appropriate

#### 6. Initial Resettlement Inventory and Resettlement Policy Framework

The Consultant shall undertake an initial inventory of land and asset acquisition, any loss of access to resources and resettlement requirements for each road, resulting in an estimate of physical and economic displacement. Physical relocation of households or commercial businesses is not anticipated to be large, but this needs to be confirmed.

Estimates will be prepared for each road. The inventory will cover at a minimum: number of house plots and associate structures (houses, garages, outbuildings, fences, etc.) taken in part or in their entirety; number of business (categorized by type, i.e., roadside stand or table, kiosk, shop, workshop, manufacturing area, etc.) taken in part and in their entirety; area and type of crops lost, gardens lost; number and type of trees lost; area and type of land use for any other land take; cemeteries or other burial areas; historic or culturally important sites; public utilities (including utility poles), public and community infrastructure of all types; and any other public or community assets. The Consultant shall record land occupation within the Right of Way (ROW) or areas outside the ROW that could be needed for each kilometer of road. The Consultant will propose the methodology for the inventory and provide associated forms and means of record. Similarly the Consultant will propose the need for research or other investigation to determine if there will be loss of access to resources. The Consultant may propose to use video cameras, aerial photography, satellite imagery or other methods to

supplement on-the-ground visual documentation of the occupation of the ROW or other land takes needed for the roads.

During the inventory or as a second step, this contract requires that the Consultant's resettlement experts and the design engineers jointly and interactively make assessments in the field that will minimize the amount of land takings, loss of assets and structures, or loss of access to resources and ensure that the alignments, widening, culverts, drainage ways or other are adjusted or shifted as feasible to avoid economic and physical displacement.

Based on the process and demographic information, the Consultant shall provide an approximate number of project-affected people by type and extent of impact, i.e., physically displaced or economically displaced. The Consultant will also provide unit costs to replace each type of land taking, loss of structures or assets or loss of access to resources, keeping in mind that consistent with OP 4.12, livelihoods must be restored.

To prepare for, and support, compensation of project-affected persons, the Consultant shall prepare a separate (stand-alone) report containing (i) the results of the inventory and potential requirements for restoration of livelihood for each road; and (ii) costs of the potential losses for each road, and (iii) a Resettlement Policy Framework (RPF) that establishes the underlying objectives and principles, organizational arrangements, and funding mechanisms by which land acquisition and resettlement will be undertaken. Further detail on the RPF is provided below.

The RPF shall be prepared in accordance with World Bank OP 4.12 on Involuntary Resettlement and applicable GoM laws and guidelines. In this regard, the Consultant will collect the information necessary to cover in acceptable detail the following elements that are required for a RPF:

- (a) Brief description of the project and components for which land acquisition and resettlement are required;
- (b) Principles and objectives governing resettlement preparation and implementation;
- (c) Description of the process for preparing and approving resettlement plans;
- (d) Measures proposed for bridging any gaps between national resettlement policies and World Bank standards;
- (e) Estimated population displacement and likely categories of displaced persons, to the extent feasible;
- (f) Eligibility criteria for defining various categories of displaced persons;
- (g) Methods of valuing affected assets;
- (h) Organizational procedures for delivery of entitlements;
- (i) Description of the implementation process, linking resettlement implementation to civil works:
- (j) Description of the informal and formal grievance redress mechanisms;
- (k) Description of the arrangements for funding resettlement, including the preparation and review of cost estimates, the flow of funds, and contingency arrangements;
- (l) Description of mechanisms for consultations with, and participation of, displaced persons in planning, implementation, and monitoring; and
- (m) Arrangements for monitoring by the implementing agency and, if required, by independent monitors.

The RPF will be processed using the same steps as for the EIAs and EMP outlined early. In addition, the Consultant will propose in the Inception Plan when the initial estimates of land takings can be provided as interim deliverables for each road, so that SRA will have early information on the magnitude of physical and economic displacement.

#### 7. Environmental and Social Clauses for Technical Specifications

The Consultant will provide environmental and social-related clauses for use in the technical specifications, based on the requirements elaborated in the EMPs. These will constitute an Annex to the EIA or EMP and be prepared in close coordination with the design work.

On the basis of EIA and EMP findings the Consultant will provide clauses and specifications recommended for inclusion in the relevant documents for construction firms. The Consultant shall:

- Determine clauses and specifications to serve as a draft for those to be included in the bidding documents for construction contractor(s) to reflect the comprehensive environmental and social mitigative measures, including the safety of workers and the public and the actions required as part of an HIV/AIDs awareness and prevention plan.
- Prepare specific instructions, for eventual inclusion in the bidding documents for construction contractor(s) to describe mitigative measures related to preservation or conservation of the site's existing features, including buildings, flora and fauna, and mitigative measures related to construction activities, including quarries, borrow pits, laydown areas, transport of construction materials, site construction and disposal of excavated and construction-related materials:
- Prepare provisions for eventual inclusion in the bidding documents, describing the management of 'chance finds' i.e., historical and cultural objects discovered during construction, in accordance with Moldovan law and regulations.
- Make clear what clauses and specifications would apply to all sites and which sites have special or sensitive features requiring specific attention and specific measures.

#### ANNEX 2

## General information about the roads under the project

Road sections to be included in the studies are shown in the Table 1 below:

Nr	Road/road section	Length, km		
Feasibility, environmental and social studies, and detailed design				
1	R1 Chisinau-Ungheni-Sculeni-Romanian border	120.1		
2	R16 Balti-Falesti-Sculeni	59.6		
3	R13 Balti-Soldanesti-Ribnita (section Balti-Gura Camencii)	39.9		
4	M14 Brest-Briceni-Chisinau-Tiraspol-Odesa (section Balti - Chisinau)	131.6		
5	R33 Hincesti-Lapusna-M1	37.2		
6	R34 Hincesti-Leova-Cahul-Slobozia Mare	167.6		
7	R3 Chisinau-Hincesti-Cimislia-Basarabeasca (section Hincesti-Cimislia)	39.4		
8	R6 M1-Ialoveni (section M1-R3)	6.0		
9	R9 Soroca-Arionesti- Moghiliov Podolski (section Arionesti-Otaci)	9.6		
Detailed design only				
10	M14 Brest-Briceni-Chisinau-Tiraspol-Odesa (section Balti - Criva)	133.3		
11	M21 Chisinau-Dubasari-Poltava	36.5		
12	R9 Soroca-Arionesti- Moghiliov Podolski (section Drochia junction-Arionesti)	31.1		

#### 1. R1 (Chisinau-Ungheni-Sculeni-Romanian border)

The R1 road runs from the capital of the Republic of Moldova, the municipality of Chisinau, to the border-crossing point between Moldova and Romania at Sculeni. The road represents an important connection between Central and North-West parts of Moldova and passes towns of Straseni, Calarasi and Ungheni, administrative centers for raions, and 15 villages.

- Pavement type asphalt concrete
- Road width (no. traffic lanes)
  - 2 lanes 114 km
  - o 3 lanes 3.6 km
  - 4 lanes 2.5 km
- Bridges
  - Total number 36
  - Total length 400 meters
  - Total number of spans 64

#### 2. R16 (Balti-Falesti-Sculeni)

The R16 road runs from the largest city in the Northern part of the country, the municipality of Balti, to the border-crossing point between Republic of Moldova and Romania at Sculeni. The road passes 7 villages and town of Falesti, an administrative center for a raion.

- Pavement type asphalt concrete
- Road width (no. traffic lanes)
  - 2 lanes 59.6 km
- Bridges

- Total number –6
- Total length 95 meters
- $\circ$  Total number of spans 10

#### 3. R13 (Balti-Soldanesti-Ribnita, section Balti-Gura Camencii)

The R13 project road section runs from the municipality of Balti toward the junction with M2 road at Gura-Camencii village. The road passes 3 villages and town of Floresti, an administrative center for a raion.

- Pavement type asphalt concrete
- Road width (no. traffic lanes)
  - 2 lanes 28.9 km
  - o 3 lanes 9.4 km
  - 4 lanes 1.6 km
- Bridges
  - Total number –8
  - Total length 229 meters
  - Total number of spans 19

## 4. M14 (Brest-Briceni-Chisinau-Tiraspol-Odesa, section Balti - Chisinau)

The M14 project road section runs from the municipality of Balti toward the capital of the Republic of Moldova, the municipality of Chisinau. The road bypasses all big localities and passes 3 villages only.

- Pavement type cement concrete
- Road width (no. traffic lanes)
  - 2 lanes 108.6 km
  - $\circ$  3 lanes 23 km
- Bridges
  - Total number –11
  - Total length 1221 meters
  - Total number of spans 45

#### 5. R33 (Hincesti-Lapusna-M1)

The R33 road runs from Hincesti town to the border-crossing point between Moldova and Romania at Leuseni. The road passes 3 villages.

- Pavement type asphalt concrete
- Road width (no. traffic lanes)
  - $\circ$  2 lanes 37.2 km
- Bridges
  - Total number –7
  - $\circ$  Total length 77 meters
  - Total number of spans 11

#### 6. R34 (Hincesti-Leova-Cahul-Slobozia Mare)

The R33 road runs south from Hincesti town towards the Guirgiulesti cargo and passenger port, and to the border-crossing point between Moldova and Romania at Leuseni. The road represents

an important connection between central and Southern parts of Moldova and passes towns of Hincesti, Leova, Cantemir and Cahul, administrative centers for raions, and 23 villages.

- Pavement type asphalt concrete
- Road width (no. traffic lanes)
  - 2 lanes 167.6 km
- Bridges
  - o Total number –46
  - Total length 521 meters
  - Total number of spans 74

#### 7. R3 (Chisinau-Hincesti-Cimislia-Basarabeasca, section Hincesti-Cimislia)

Hincesti-Cimislia road section is an important link on the route connecting Central and Southern part of Moldova from Chisinau to the port of Giurgiulesti. On the road from Chisinau to Comrat (capital of the Autonomous Territorial Unit Gagauzia) it is the last remaining road section that needs to be rehabilitated. The road section runs from Hincesti to Cimislia through 3 villages.

- Pavement type asphalt concrete
- Road width (no. traffic lanes)
  - 2 lanes 39.4km
- Bridges
  - Total number –18
  - Total length 196 meters
  - $\circ$  Total number of spans 28

#### 8. R6 (M1-Ialoveni road, section M1-R3)

The road section represents a part of R6 national road connection roads M1 and R6, and forms the South-Western part of Chisinau bypass.

- Pavement type asphalt concrete
- Road width (no. traffic lanes)
  - $\circ$  4 lanes 6.0 km
- Bridges
  - Total number –0

#### 9. R9 (Soroca-Arionesti-Moghiliov Podolski road, section Arionesti-Otaci)

The road section represents a part of R9 national road running from Arionesti village to Otaci town.

- Pavement type asphalt concrete
- Road width (no. traffic lanes)
  - o 2 lanes 9.6 km
- Bridges
  - Total number –0

#### 10. M14 (Brest-Briceni-Chisinau-Tiraspol-Odesa road, section Balti - Criva)

The road section represents a part of M14 national road and runs from the border-crossing point between Moldova and Ukraine at Criva to the municipality of Balti. The road passes the towns of Briceni and Editet, administrative centers for raions, and 10 villages.

- Pavement type asphalt concrete
- Road width (no. traffic lanes)
  - $\circ$  2 lanes 39.7 km
  - o 3 lanes 90.6 km
  - $\circ$  4 lanes 3 km
- Bridges
  - Total number –19
  - Total length 672 meters
  - Total number of spans 55

### 11. M21 (Chisinau-Dubasari-Poltava road, section Chisinau-Dniester river)

The M21 national road forms a part of Trans-European Transport corridor IX and runs east from the capital of Moldova, municipality of Chisinau, to the Dniester River.

- Pavement type cement concrete (partially overlaid with asphalt)
- Road width (no. traffic lanes)
  - 2 lanes 26.8 km
  - $\circ$  3 lanes 5.8 km
  - $\circ$  4 lanes 3.9 km
- Bridges
  - o Total number –4
  - Total length 268 meters
  - $\circ$  Total number of spans 13

### 12. R9 (Soroca-Arionesti- Moghiliov Podolski road, section Drochia junction-Arionesti)

The road section represents a part of R9 national road running from Drochia junction to Arionesti through 3 villages.

- Pavement type asphalt concrete
- Road width (no. traffic lanes)
  - o 2 lanes 31.1 km
- Bridges
  - $\circ$  Total number 0.

### **Section 6. Standard Forms of Contract**

The attached Form of Contract shall be used.

# CONTRACT FOR CONSULTANTS' SERVICES Lump-Sum

between

### S.E. State Road Administration

[name of the Client]

and

[name of the Consultant]

Dated:

# I. Form of Contract

(Text in brackets [] is optional; all notes should be deleted in final text)

This CONTRACT (hereinafter called the "Contract") is made the [day] day of the month of [month], [year], between, on the one hand, [name of client] (hereinafter called the "Client") and, on the other hand, [name of Consultant] (hereinafter called the "Consultant").

[Note: If the Consultant consist of more than one entity, the above should be partially amended to read as follows: "...(hereinafter called the "Client") and, on the other hand, a joint venture/consortium/association consisting of the following entities, each of which will be jointly and severally liable to the Client for all the Consultant's obligations under this Contract, namely, [name of Consultant] and [name of Consultant] (hereinafter called the "Consultant").]

#### WHEREAS

- (a) the Client has requested the Consultant to provide certain consulting services as defined in this Contract (hereinafter called the "Services");
- (b) the Consultant, having represented to the Client that it has the required professional skills, and personnel and technical resources, has agreed to provide the Services on the terms and conditions set forth in this Contract:
- (c) the Client has received a credit from the International Development Association (hereinafter called the "Association") towards the cost of the Services and intends to apply a portion of the proceeds of this credit to eligible payments under this Contract, it being understood (i) that payments by the Association will be made only at the request of the Client and upon approval by the Association, (ii) that such payments will be subject, in all respects, to the terms and conditions of the agreement providing for the credit, and (iii) that no party other than the Client shall derive any rights from the agreement providing for the credit or have any claim to the credit proceeds;

NOW THEREFORE the parties hereto hereby agree as follows:

- 1. The following documents attached hereto shall be deemed to form an integral part of this Contract:
  - (a) The General Conditions of Contract;
  - (b) The Special Conditions of Contract;
  - (c) The following Appendices:

Appendix A: Description of Services

Appendix B: Reporting Requirements

Appendix C: Key Personnel and Sub-Consultants

Appendix D: Breakdown of Contract Price in Foreign Currency

Appendix E: Breakdown of Contract Price in Local Currency

Appendix F: Services and Facilities Provided by the Client

Appendix G: Not used

2. The mutual rights and obligations of the Client and the Consultant shall be as set forth in the Contract, in particular:

- (a) the Consultants shall carry out the Services in accordance with the provisions of the Contract; and
- (b) the Client shall make payments to the Consultants in accordance with the provisions of the Contract.

IN WITNESS WHEREOF, the Parties hereto have caused this Contract to be signed in their respective names as of the day and year first above written.

For and on behalf of [name of Client]
[Authorized Representative]
For and on behalf of [name of Consultant]
[Authorized Representative]
[Note: If the Consultant consists of more than one entity, all these entities should appear as signatories, e.g., in the following manner:]
For and on behalf of each of the Members of the Consultant
[name of member]
[Authorized Representative]
[name of member]
[Authorized Representative]

### **II. General Conditions of Contract**

### 1. GENERAL PROVISIONS

### 1.1 Definitions

Unless the context otherwise requires, the following terms whenever used in this Contract have the following meanings:

- (a) "Applicable Law" means the laws and any other instruments having the force of law in the Government's country, or in such other country as may be specified in the Special Conditions of Contract (SC), as they may be issued and in force from time to time.
- (b) "Bank" means the International Bank for Reconstruction and Development, Washington, D.C., U.S.A., or the International Development Association, Washington, D.C., U.S.A.
- (c) "Consultant" means any private or public entity that will provide the Services to the Client under the Contract.
- (d) "Contract" means the Contract signed by the Parties and all the attached documents listed in its Clause 1, that is these General Conditions (GC), the Special Conditions (SC), and the Appendices.
- (e) "Contract Price" means the price to be paid for the performance of the Services, in accordance with Clause 6;
- (f) "Effective Date" means the date on which this Contract comes into force and effect pursuant to Clause GC 2.1.
- (g) "Foreign Currency" means any currency other than the currency of the Client's country.
- (h) "GC" means these General Conditions of Contract.
- (i) "Government" means the Government of the Client's country.
- (j) "Local Currency" means the currency of the Client's country.
- (k) "Member" means any of the entities that make up the joint venture/consortium/association, and "Members" means all these entities.
- (1) "Party" means the Client or the Consultant, as the case may be, and "Parties" means both of them.
- (m) "Personnel" means persons hired by the Consultant or by any Sub-Consultants and assigned to the performance of the Services or any part thereof.
- (n) "SC" means the Special Conditions of Contract by which the GC may be amended or supplemented.
- (o) "Services" means the work to be performed by the Consultant pursuant to this Contract, as described in Appendix A hereto.
- (p) "Sub-Consultants" means any person or entity to whom/which the

Consultant subcontracts any part of the Services.

(q) "In writing" means communicated in written form with proof of receipt.

### 1.2 Law Governing Contract

This Contract, its meaning and interpretation, and the relation between the Parties shall be governed by the Applicable Law.

### 1.3 Language

This Contract has been executed in the language specified in the SC, which shall be the binding and controlling language for all matters relating to the meaning or interpretation of this Contract.

### 1.4 Notices

1.4.1

Any notice, request or consent required or permitted to be given or made pursuant to this Contract shall be in writing. Any such notice, request or consent shall be deemed to have been given or made when delivered in person to an authorized representative of the Party to whom the communication is addressed, or when sent to such Party at the address specified in the SC.

1.4.2

A Party may change its address for notice hereunder by giving the other Party notice in writing of such change to the address specified in the SC.

### 1.5 Location

The Services shall be performed at such locations as are specified in Appendix A hereto and, where the location of a particular task is not so specified, at such locations, whether in the Government's country or elsewhere, as the Client may approve.

# 1.6 Authority of Member in Charge

In case the Consultant consists of a joint venture/ consortium/ association of more than one entity, the Members hereby authorize the entity specified in the SC to act on their behalf in exercising all the Consultant's rights and obligations towards the Client under this Contract, including without limitation the receiving of instructions and payments from the Client.

### 1.7 Authorized Representatives

Any action required or permitted to be taken, and any document required or permitted to be executed under this Contract by the Client or the Consultant may be taken or executed by the officials specified in the SC.

# 1.8 Taxes and Duties

The Consultant, Sub-Consultants, and their Personnel shall pay such indirect taxes, duties, fees, and other impositions levied under the Applicable Law as specified in the SC, the amount of which is deemed to have been included in the Contract Price.

# 1.9 Fraud and Corruption

### 1.9.1 Definitions

It is the Bank's policy to require that Borrowers (including beneficiaries of Bank loans), as well as Consultants under Bank-financed contracts, observe the highest standard of ethics during the selection and execution of such contracts. In pursuance of this policy, the Bank:

(a) defines, for the purpose of this provision, the terms set forth below as follows:

- (i) "corrupt practice" means the offering, receiving, or soliciting, directly or indirectly, of any thing of value to influence the action of a public official in the selection process or in contract execution;
- (ii) "fraudulent practice" means a misrepresentation or omission of facts in order to influence a selection process or the execution of a contract:
- (iii) "collusive practices" means a scheme or arrangement between two or more consultants, with or without the knowledge of the Borrower, designed to establish prices at artificial, noncompetitive levels;
- (iv) "coercive practices" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in a procurement process, or affect the execution of a contract:

### 1.9.2 Measures to be Taken

- (b) will cancel the portion of the loan allocated to a contract if it determines at any time that representatives of the Borrower or of a beneficiary of the loan were engaged in corrupt, fraudulent, collusive or coercive practices during the selection process or the execution of that contract, without the Borrower having taken timely and appropriate action satisfactory to the Bank to remedy the situation;
- (c) will sanction a Consultant, including declaring the Consultant ineligible, either indefinitely or for a stated period of time, to be awarded a Bank-financed contract if it at any time determines that the Consultant has, directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for, or in executing, a Bank-financed contract;

# 1.9.3 Commissions and Fees

(d) will require the successful Consultant to disclose any commissions or fees that may have been paid or are to be paid to agents, representatives, or commission agents with respect to the selection process or execution of the contract. The information disclosed must include at least the name and address of the agent, representative, or commission agent, the amount and currency, and the purpose of the commission or fee.

### 2. COMMENCEMENT, COMPLETION, MODIFICATION AND TERMINATION OF CONTRACT

# 2.1 Effectiveness of Contract

This Contract shall come into effect on the date the Contract is signed by both Parties or such other later date as may be stated in the SC. The date the Contract comes into effect is defined as the Effective Date.

2.2 Commencement of Services

The Consultant shall begin carrying out the Services not later than the number of days after the Effective Date specified in the SC.

**2.3** Expiration of Unless terminated earlier pursuant to Clause GC 2.6 hereof, this Contract

### Contract

shall expire at the end of such time period after the Effective Date as specified in the SC.

## 2.4 Modifications or Variations

Any modification or variation of the terms and conditions of this Contract, including any modification or variation of the scope of the Services, may only be made by written agreement between the Parties. However, each Party shall give due consideration to any proposals for modification or variation made by the other Party.

### 2.5 Force Majeure

### 2.5.1 Definition

For the purposes of this Contract, "Force Majeure" means an event which is beyond the reasonable control of a Party and which makes a Party's performance of its obligations under the Contract impossible or so impractical as to be considered impossible under the circumstances.

# 2.5.2 No Breach of Contract

The failure of a Party to fulfill any of its obligations under the contract shall not be considered to be a breach of, or default under, this Contract insofar as such inability arises from an event of Force Majeure, provided that the Party affected by such an event (a) has taken all reasonable precautions, due care and reasonable alternative measures in order to carry out the terms and conditions of this Contract, and (b) has informed the other Party as soon as possible about the occurrence of such an event.

# 2.5.3 Extension of Time

Any period within which a Party shall, pursuant to this Contract, complete any action or task, shall be extended for a period equal to the time during which such Party was unable to perform such action as a result of Force Majeure.

### 2.5.4 Payments

During the period of their inability to perform the Services as a result of an event of Force Majeure, the Consultant shall be entitled to continue to be paid under the terms of this Contract, as well as to be reimbursed for additional costs reasonably and necessarily incurred by them during such period for the purposes of the Services and in reactivating the Service after the end of such period.

### 2.6 Termination

## 2.6.1 By the Client

The Client may terminate this Contract in case of the occurrence of any of the events specified in paragraphs (a) through (f) of this Clause GC 2.6.1. In such an occurrence the Client shall give a not less than thirty (30) days' written notice of termination to the Consultant, and sixty (60) days' in the case of the event referred to in (e).

- (a) If the Consultant does not remedy a failure in the performance of their obligations under the Contract, within thirty (30) days after being notified or within any further period as the Client may have subsequently approved in writing.
- (b) If the Consultant becomes insolvent or bankrupt.
- (c) If the Consultant, in the judgment of the Client has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

- (d) If, as the result of Force Majeure, the Consultant are unable to perform a material portion of the Services for a period of not less than sixty (60) days.
- (e) If the Client, in its sole discretion and for any reason whatsoever, decides to terminate this Contract.
- (f) If the Consultant fails to comply with any final decision reached as a result of arbitration proceedings pursuant to Clause GC 8 hereof.

# 2.6.2 By the Consultant

The Consultants may terminate this Contract, by not less than thirty (30) days' written notice to the Client, such notice to be given after the occurrence of any of the events specified in paragraphs (a) through (c) of this Clause GC 2.6.2:

### 2.6.3 Payment upon Termination

Upon termination of this Contract pursuant to Clauses GC 2.6.1 or GC 2.6.2, the Client shall make the following payments to the Consultant:

- (a) payment pursuant to Clause GC 6 for Services satisfactorily performed prior to the effective date of termination;
- (b) except in the case of termination pursuant to paragraphs (a) through (c), and (f) of Clause GC 2.6.1, reimbursement of any reasonable cost incident to the prompt and orderly termination of the Contract, including the cost of the return travel of the Personnel and their eligible dependents.

### 3. OBLIGATIONS OF THE CONSULTANT

### 3.1 General

3.1.1 Standard of Performance The Consultant shall perform the Services and carry out their obligations hereunder with all due diligence, efficiency and economy, in accordance with generally accepted professional standards and practices, and shall observe sound management practices, and employ appropriate technology and safe and effective equipment, machinery, materials and methods. The Consultant shall always act, in respect of any matter relating to this Contract or to the Services, as faithful advisers to the Client, and shall at all times support and safeguard the Client's legitimate interests in any dealings with Sub-Consultants or third Parties.

# 3.2 Conflict of Interests

The Consultant shall hold the Client's interests paramount, without any consideration for future work, and strictly avoid conflict with other assignments or their own corporate interests.

3.2.1 Consultants Not to Benefit from Commissions, Discounts, etc.

The payment of the Consultant pursuant to Clause GC 6 shall constitute the Consultant's only payment in connection with this Contract or the Services, and the Consultant shall not accept for their own benefit any trade commission, discount, or similar payment in connection with activities pursuant to this Contract or to the Services or in the discharge of their obligations under the Contract, and the Consultant shall use their best efforts to ensure that the Personnel, any Sub-Consultants, and agents of either of them similarly shall not receive any such additional payment.

# 3.2.2 Consultant and Affiliates Not to be Otherwise Interested in Project

The Consultant agrees that, during the term of this Contract and after its termination, the Consultant and any entity affiliated with the Consultant, as well as any Sub-Consultants and any entity affiliated with such Sub-Consultants, shall be disqualified from providing goods, works or services (other than consulting services) resulting from or directly related to the Consultant's Services for the preparation or implementation of the project.

# 3.2.3 Prohibition of Conflicting Activities

The Consultant shall not engage, and shall cause their Personnel as well as their Sub-Consultants and their Personnel not to engage, either directly or indirectly, in any business or professional activities which would conflict with the activities assigned to them under this Contract.

### 3.3 Confidentiality

Except with the prior written consent of the Client, the Consultant and the Personnel shall not at any time communicate to any person or entity any confidential information acquired in the course of the Services, nor shall the Consultant and the Personnel make public the recommendations formulated in the course of, or as a result of, the Services.

# 3.4 Insurance to be Taken Out by the Consultant

The Consultant (a) shall take out and maintain, and shall cause any Sub-Consultants to take out and maintain, at their (or the Sub-Consultants', as the case may be) own cost but on terms and conditions approved by the Client, insurance against the risks, and for the coverage, as shall be specified in the SC; and (b) at the Client's request, shall provide evidence to the Client showing that such insurance has been taken out and maintained and that the current premiums have been paid.

# 3.5 Consultant's Actions Requiring Client's Prior Approval

The Consultant shall obtain the Client's prior approval in writing before taking any of the following actions:

- (a) entering into a subcontract for the performance of any part of the Services,
- (b) appointing such members of the Personnel not listed by name in Appendix C, and
- (c) any other action that may be specified in the SC.

# 3.6 Reporting Obligations

- (a) The Consultant shall submit to the Client the reports and documents specified in Appendix B hereto, in the form, in the numbers and within the time periods set forth in the said Appendix.
- (b) Final reports shall be delivered in CD ROM in addition to the hard copies specified in said Appendix.
- 3.7 Documents
  Prepared by
  the Consultant
  to be the
  Property of
  the Client
- (a) All plans, drawings, specifications, designs, reports, other documents and software submitted by the Consultant under this Contract shall become and remain the property of the Client, and the Consultant shall, not later than upon termination or expiration of this Contract, deliver all such documents to the Client, together with a detailed inventory thereof.
- (b) The Consultant may retain a copy of such documents and software. Restrictions about the future use of these documents, if any, shall

be specified in the SC.

### 3.8 Accounting, Inspection and Auditing

The Consultant (i) shall keep accurate and systematic accounts and records in respect of the Services hereunder, in accordance with internationally accepted accounting principles and in such form and detail as will clearly identify all relevant time changes and costs, and the bases thereof, and (ii) shall periodically permit the Client or its designated representative and/or the Bank, and up to two years from the expiration or termination of this Contract, to inspect the same and make copies thereof as well as to have them audited by auditors appointed by the Client or the Bank, if so required by the Client or the Bank as the case may be.

### 4. Consultant's Personnel

# **4.1 Description of Personnel**

The Consultant shall employ and provide such qualified and experienced Personnel and Sub-Consultants as are required to carry out the Services. The titles, agreed job descriptions, minimum qualifications, and estimated periods of engagement in the carrying out of the Services of the Consultant's Key Personnel are described in Appendix C. The Key Personnel and Sub-Consultants listed by title as well as by name in Appendix C are hereby approved by the Client.

# 4.2 Removal and/or Replacement of Personnel

- (a) Except as the Client may otherwise agree, no changes shall be made in the Key Personnel. If, for any reason beyond the reasonable control of the Consultant, such as retirement, death, medical incapacity, among others, it becomes necessary to replace any of the Key Personnel, the Consultant shall provide as a replacement a person of equivalent or better qualifications.
- (b) If the Client finds that any of the Personnel have (i) committed serious misconduct or have been charged with having committed a criminal action, or (ii) have reasonable cause to be dissatisfied with the performance of any of the Personnel, then the Consultant shall, at the Client's written request specifying the grounds thereof, provide as a replacement a person with qualifications and experience acceptable to the Client.
- (c) The Consultant shall have no claim for additional costs arising out of or incidental to any removal and/or replacement of Personnel.

### 5. OBLIGATIONS OF THE CLIENT

# 5.1 Assistance and Exemptions

The Client shall use its best efforts to ensure that the Government shall provide the Consultant such assistance and exemptions as specified in the SC.

### 5.2 Change in the Applicable Law Related to

If, after the date of this Contract, there is any change in the Applicable Law with respect to taxes and duties which increases or decreases the cost incurred by the Consultant in performing the Services, then the

# Taxes and Duties

remuneration and reimbursable expenses otherwise payable to the Consultant under this Contract shall be increased or decreased accordingly by agreement between the Parties, and corresponding adjustments shall be made to the amounts referred to in Clauses GC 6.2 (a) or (b), as the case may be.

# 5.3 Services and Facilities

The Client shall make available free of charge to the Consultant the Services and Facilities listed under Appendix F.

### 6. PAYMENTS TO THE CONSULTANT

### 6.1 Lump-Sum Payment

The total payment due to the Consultant shall not exceed the Contract Price which is an all inclusive fixed lump-sum covering all costs required to carry out the Services described in Appendix A. Except as provided in Clause 5.2, the Contract Price may only be increased above the amounts stated in Clause 6.2 if the Parties have agreed to additional payments in accordance with Clause 2.4.

- **6.2** Contract Price
- (a) The price payable in foreign currency/currencies is set forth in the SC.
- (b) The price payable in local currency is set forth in the SC.
- 6.3 Payment for Additional Services

For the purpose of determining the remuneration due for additional services as may be agreed under Clause 2.4, a breakdown of the lump-sum price is provided in Appendices D and E.

6.4 Terms and Conditions of Payment

Payments will be made to the account of the Consultant and according to the payment schedule stated in the SC. Unless otherwise stated in the SC, the first payment shall be made against the provision by the Consultant of an advance payment guarantee for the same amount, and shall be valid for the period stated in the SC. Such guarantee shall be in the form set forth in Appendix G hereto, or in such other form, as the Client shall have approved in writing. Any other payment shall be made after the conditions listed in the SC for such payment have been met, and the Consultant has submitted an invoice to the Client specifying the amount due.

6.5 Interest on Delayed Payments

If the Client has delayed payments beyond fifteen (15) days after the due date stated in the Clause SC 6.4, interest shall be paid to the Consultant for each day of delay at the rate stated in the SC.

### 7. GOOD FAITH

### 7.1 Good Faith

The Parties undertake to act in good faith with respect to each other's rights under this Contract and to adopt all reasonable measures to ensure the realization of the objectives of this Contract.

### 8. SETTLEMENT OF DISPUTES

# 8.1 Amicable Settlement

The Parties agree that the avoidance or early resolution of disputes is crucial for a smooth execution of the Contract and the success of the assignment. The Parties shall use their best efforts to settle amicably all disputes arising out of or in connection with this Contract or its interpretation.

# 8.2 Dispute Resolution

Any dispute between the Parties as to matters arising pursuant to this Contract that cannot be settled amicably within thirty (30) days after receipt by one Party of the other Party's request for such amicable settlement may be submitted by either Party for settlement in accordance with the provisions specified in the SC.

## **III. Special Conditions of Contract**

The words "in the Government's country" are amended to read "in the Republic of Moldova."
The language is English.
The addresses are:
Client: S.E. State Road Administration
Attention: Mr. Vitalie Panurco
Facsimile: +373 22 74 12 19
E-mail: usatii@asd.md
Consultant:
Attention:
Facsimile:
E-mail:
{The Member in Charge is [insert name of member]}
The Authorized Representatives are:
For the Client: Mr. Anatolii Usatii
For the Consultant:
The Client warrants that the Consultant, the Sub-Consultants and the Personne shall be exempt from (or that the Client shall pay on behalf of the Consultant the Sub-Consultants and the Personnel, or shall reimburse the Consultant, the Sub-Consultants and the Personnel for) any indirect taxes, duties, fees, levies and other impositions imposed, under the Applicable Law, on the Consultant the Sub-Consultants and the Personnel in respect of:  (a) any payments whatsoever made to the Consultant, Sub-Consultants and the Personnel (other than nationals or permanent residents of the Government's country), in connection with the carrying out of the

### Services; any equipment, materials and supplies brought into the Government's country by the Consultant or Sub-Consultants for the purpose of carrying out the Services and which, after having been brought into such territories, will be subsequently withdrawn there from by them; any equipment imported for the purpose of carrying out the Services and paid for out of funds provided by the Client and which is treated as property of the Client; (d) any property brought into the Government's country by the Consultant, any Sub-Consultants or the Personnel (other than nationals or permanent residents of the Government's country), or the eligible dependents of such Personnel for their personal use and which will subsequently be withdrawn there from by them upon their respective departure from the Government's country, provided that: the Consultant, Sub-Consultants and Personnel, and their eligible (1) dependents, shall follow the usual customs procedures of the Government's country in importing property into the Government's country; and if the Consultant, Sub-Consultants or Personnel, or their eligible dependents, do not withdraw but dispose of any property in the Government's country upon which customs duties and taxes have been exempted, the Consultant, Sub-Consultants or Personnel, as the case may be, (i) shall bear such customs duties and taxes in conformity with the regulations of the Government's country, or (ii) shall reimburse them to the Client if they were paid by the Client at the time the property in question was brought into the Government's country. The Consultant shall not be entitled to such tax exemption, payment of taxes on its behalf by the Client or reimbursement thereof if the Consultant does not provide to the Client supporting documents confirming that the equipment, materials and supplies referred to in the sub-paragraph (b) above have been cleared by customs in the Consultant's name or supporting documents issued by the equipment vendor in the name of the Consultant for the equipment referred to in the sub-paragraph (c) above. 2.2 The date for the commencement of Services is \_\_\_\_ 2.3 The time period shall be 11 months. 3.4 The risks and the coverage shall be as follows: Third Party motor vehicle liability insurance in respect of motor vehicles operated in the Government's country by the Consultant or its Personnel or any Sub-Consultants or their Personnel, with a minimum coverage of

	USD10,000;
	(b) Third Party liability insurance, with a minimum coverage of USD10,000;
	(c) professional liability insurance, with a minimum coverage of contract amount equivalent;
	(d) employer's liability and workers' compensation insurance in respect of the Personnel of the Consultant and of any Sub-Consultants, in accordance with the relevant provisions of the Applicable Law, as well as, with respect to such Personnel, any such life, health, accident, travel or other insurance as may be appropriate; and
	(e) insurance against loss of or damage to (i) equipment purchased in whole or in part with funds provided under this Contract, (ii) the Consultant's property used in the performance of the Services, and (iii) any documents prepared by the Consultant in the performance of the Services.
3.7 (b)	The Consultant shall not use these documents and software for purposes unrelated to this Contract without the prior written approval of the Client.
5.1	Not applicable.
6.2(a)	The amount in foreign currency or currencies is [insert amount].
6.2(b)	The amount in local currency is [insert amount].
6.4	The accounts are:
	for foreign currency or currencies: [insert account]
	for local currency: [insert account]
	Payments shall be made according to the following schedule:
	<ul> <li>20 % upon presentation of the Inception Report</li> <li>20% upon presentation of Final Feasibility Study report</li> <li>10% upon presentation the Environmental and Social mitigation reports</li> <li>10 % upon presentation of the Preliminary Design report*</li> <li>20% upon presentation of the 50% Design report*</li> <li>20% upon presentation of the Final Detailed Design report*</li> </ul>
	* If only a part of a road is demonstrated to be feasible from the Phase I studies, the cost for the preliminary, 50% design and final detailed design studies for such portion of road will be calculated by the following formula:
	$Cost_x = Cost_t \times \frac{Length_x}{Length_t}$
	$Cost_x$ - the cost for the preliminary/50% design/final detailed design study for a portion of road that is demonstrated to be feasible from the Phase I

6.5	studies;  Cost <sub>t</sub> - the cost for the preliminary/50% design/final detailed design study for the entire road/road section, provided by the Consultant in the Form FIN-3;  Length <sub>x</sub> - length of the corresponding portion of the road/road section that is demonstrated to be feasible from the Phase I studies;  Length <sub>t</sub> - the total length of the road/road section.  The interest rate is: 0.05%.
8.2	Disputes shall be settled by arbitration in accordance with the following provisions:  1. Selection of Arbitrators. Each dispute submitted by a Party to arbitration shall be heard by a sole arbitrator or an arbitration panel composed of
	three arbitrators, in accordance with the following provisions:  (a) Where the Parties agree that the dispute concerns a technical matter, they may agree to appoint a sole arbitrator or, failing agreement on the identity of such sole arbitrator within thirty (30) days after receipt by the other Party of the proposal of a name for such an appointment by the Party who initiated the proceedings, either Party may apply to the Federation Internationale des Ingenieurs-Conseil (FIDIC) of Lausanne, Switzerland for a list of not fewer than five nominees and, on receipt of such list, the Parties shall alternately strike names therefrom, and the last remaining nominee on the list shall be the sole arbitrator for the matter in dispute. If the last remaining nominee has not been determined in this manner within sixty (60) days of the date of the list, the Federation Internationale des Ingenieurs-Conseil (FIDIC) of Lausanne, Switzerland shall appoint, upon the request of either Party and from such list or otherwise, a sole arbitrator for the matter in dispute.
	(b) Where the Parties do not agree that the dispute concerns a technical matter, the Client and the Consultant shall each appoint one arbitrator, and these two arbitrators shall jointly appoint a third arbitrator, who shall chair the arbitration panel. If the arbitrators named by the Parties do not succeed in appointing a third arbitrator within thirty (30) days after the latter of the two arbitrators named by the Parties has been appointed, the third arbitrator shall, at the request of either Party, be appointed by the International Chamber of Commerce, Paris.
	(c) If, in a dispute subject to Clause SC 8.2 1.(b), one Party fails to appoint its arbitrator within thirty (30) days after the other Party has appointed its arbitrator, the Party which has named an arbitrator may apply to the International Chamber of Commerce, Paris to appoint a sole arbitrator for the matter in dispute, and the arbitrator appointed pursuant to such application shall be the sole arbitrator for that dispute.

- 2. <u>Rules of Procedure</u>. Except as stated herein, arbitration proceedings shall be conducted in accordance with the rules of procedure for arbitration of the United Nations Commission on International Trade Law (UNCITRAL) as in force on the date of this Contract.
- 3. <u>Substitute Arbitrators</u>. If for any reason an arbitrator is unable to perform his function, a substitute shall be appointed in the same manner as the original arbitrator.
- 4. Nationality and Qualifications of Arbitrators. The sole arbitrator or the third arbitrator appointed pursuant to paragraphs (a) through (c) of Clause SC 8.2.1 hereof shall be an internationally recognized legal or technical expert with extensive experience in relation to the matter in dispute and shall not be a national of the Consultant's home country [Note: If the Consultant consists of more than one entity, add: or of the home country of any of their Members or Parties] or of the Government's country. For the purposes of this Clause, "home country" means any of:
  - (a) the country of incorporation of the Consultant [Note: If the Consultant consists of more than one entity, add: or of any of their Members or Parties]; or
  - (b) the country in which the Consultant's [or any of their Members' or Parties'] principal place of business is located; or
  - (c) the country of nationality of a majority of the Consultant's [or of any Members' or Parties'] shareholders; or
  - (d) the country of nationality of the Sub-Consultants concerned, where the dispute involves a subcontract.
- 5. <u>Miscellaneous</u>. In any arbitration proceeding hereunder:
  - (a) proceedings shall, unless otherwise agreed by the Parties, be held in Switzerland;
  - (b) the English language shall be the official language for all purposes; and
  - (c) the decision of the sole arbitrator or of a majority of the arbitrators (or of the third arbitrator if there is no such majority) shall be final and binding and shall be enforceable in any court of competent jurisdiction, and the Parties hereby waive any objections to or claims of immunity in respect of such enforcement.

### IV. Appendices

### APPENDIX A – DESCRIPTION OF SERVICES

**Note:** Give detailed descriptions of the Services to be provided, dates for completion of various tasks, place of performance for different tasks, specific tasks to be approved by Client, etc.

(Description of services will be subsequently transferred from the ToR).

### **APPENDIX B - REPORTING REQUIREMENTS**

**Note:** List format, frequency, and contents of reports; persons to receive them; dates of submission; etc.

(Reporting requirements will be subsequently transferred from the ToR).

### APPENDIX C - KEY PERSONNEL AND SUB-CONSULTANTS

Note: List under:

- C-1 Titles [and names, if already available], detailed job descriptions and minimum qualifications of Key Foreign Personnel to be assigned to work in the Government's country, and estimated staff-months for each.
- C-2 Same as C-1 for Key Foreign Personnel to be assigned to work outside the Government's country.
- C-3 List of approved Sub-Consultants (if already available); same information with respect to their Personnel as in C-1 or C-2.
- C-4 Same information as C-1 for Key local Personnel.

(Key Personnel will be subsequently transferred from the selected consultant's technical proposal).

### APPENDIX D - BREAKDOWN OF CONTRACT PRICE IN FOREIGN CURRENCY

**Note:** List here the elements of cost used to arrive at the breakdown of the lump-sum price - foreign currency portion:

- 1. Monthly rates for Personnel (Key Personnel and other Personnel).
- 2. Reimbursable expenses.

This appendix will exclusively be used for determining remuneration for additional services.

(Breakdown of contract price will be subsequently transferred from the selected consultant's financial proposal).

### APPENDIX E - BREAKDOWN OF CONTRACT PRICE IN LOCAL CURRENCY

**Note:** List here the elements of cost used to arrive at the breakdown of the lump-sum price - local currency portion:

- 1. Monthly rates for Personnel (Key Personnel and other Personnel).
- 2. Reimbursable expenditures.

This appendix will exclusively be used for determining remuneration for additional services.

### APPENDIX F - SERVICES AND FACILITIES PROVIDED BY THE CLIENT

Note: List here the services and facilities to made available to the Consultant by the Client.

(Services and facilities will be subsequently transferred from the ToR and Consultant's Proposal).

### APPENDIX G - FORM OF ADVANCE PAYMENTS GUARANTEE

Not used