SAMPLE BIDDING DOCUMENTS

Procurement of Works and Services under

Output- and Performancebased Road Contracts

and Sample Specifications



The World Bank Washington, D.C.

October 2006

November 2009 Revision

This version 2 incorporates the Fraud and Corruption clauses of the Procurement Guidelines and are reflected in ITB 3.1 (Corrupt Practices), ITB 4.4 (Eligible Bidders), GC 11.6 (Contractor's Responsibilities), and GC 59.2.1 (Termination).

October 2006 revision

This revision dated October 2006 incorporates the following changes:

Section I - Instructions to Bidders

- para. 16.1: "...requirement of works and completion times" was replaced by "... requirements of Section VI, Specifications"
- para. 29.3: "Section VI, Works Requirements" was replaced by "Section VI, Specifications".

Section III: Evaluation and Qualification Criteria

- (Following Prequalification): Under para. 2.2, missing "CCC" and "FIN-1", were added.
- (Without Prequalification): Missing tables containing qualification and evaluation criteria, were added.

Section VI Specifications

The following paragraph, located towards the end of this section, was removed: It is nevertheless important to remember again that this sample bidding document should not be used for roads or road networks in very poor condition which require a substantial and costly upgrading and/or rehabilitation before they can be maintained. It is suggested that whenever the initial upgrading and/or rehabilitation or improvement works are estimated to cost more than 45 percent of the total contract amount, this sample bidding document should not be used."

Important Notice to Users of this Document

These Sample Bidding Documents for Procurement of Works and Services under **Output-and Performance-Based Road Contracts (OPRC)** have been issued by the World Bank on a trial basis to provide its clients with an alternative to the traditional methods of procuring road reconstruction, rehabilitation and maintenance. The documents are a further development of the earlier "Sample Bidding Documents for Procurement of **Performance-based Management and Maintenance of Roads (PMMR)**" which were issued by the Bank in February 2002. As their predecessor, these documents are focused to fit the specific nature of Performance-based Management and Maintenance of Roads (PMMR), but they are also suitable for the procurement of works and services under longer-term "Design-Build-Operate-Maintain (DBOM)" contracts for roads.

The contract herein included differs substantially from traditional contracts for civil works. The basic difference is that under the Output- and Performance-based Road Contract, most of the payments to be made to the contractor are not based on quantities of works measured by unit prices for works inputs, but on measured "outputs" reflecting the target conditions of the roads under contract (in other words: "what the roads are supposed to look like"), expressed through "Service Levels." These Service Levels are defined in the contract. Another major difference is that the Contractor is fully responsible for the design of the works which are necessary to reach the required Service Levels, and the durability and performance of the roads over a longer period.

The present documents are designed to allow for much flexibility in their use, according to the specific needs of the road network under contract (called "the Road" or "Roads" in the documents). An important focus of the contract is on **Management and Maintenance Services**, including physical works on the Roads under contract which are needed to maintain the agreed Service Levels over time, but also all activities related to the management and evaluation of the road network under contract. The contract also allows for the execution of (i) **Rehabilitation Works** to be carried out in order to bring the Roads up to pre-defined standards; (ii) **Improvement Works** aiming at adding new characteristics to the Roads in response to new traffic, safety or other considerations; and (iii) **Emergency Works** comprising of activities needed to reinstate the Roads after damage resulting from unforeseen natural phenomena with imponderable consequences.

It should be noted that the OPRC is not designed for the contractor to simply build a road and then move on to other things. It is meant to establish a **longer-term Public-Private Partnership (PPP)** between the contractor and the Government, in which both parties have long-term committments. The contractor's focus will not simply be on road construction, but on the **Integral Management of the Road Asset** over a period which should reflect the expected lifetime of the asset. In this sense, the "contractor" must be a firm or a business venture which has the technical, managerial and financial capacity to fulfill the contract in all its aspects.

Further explanations on the nature and character of Output- and Performance-Based Road Contracts are made on the following pages.

Foreword

- 1. The present sample bidding document has a general structure which is similar to the World Bank's Standard Bidding Document (SBD) for Works (May 2005), which are based on the July 2004 version of the Master Bidding Documents for Procurement of Works and User's Guide, prepared by the Multilateral Development Banks and International Financing Institutions. Given the specific characteristics of Output- and Performance-based Contracting for Roads, modifications were however made in most sections of the document including the use of several aspects found in the World Bank's Standard Bidding Documents for Supply and Installation of Plant and Equipment. In particular, the Conditions of Contract have been written in order to take into account the specific nature of the services to be provided by the Contractor, which go much beyond the mere execution of pre-defined physical works and to include the "output" basis in the contract. The contract covers an array of activities needed to achieve and maintain a certain Service Level for road users, including many activities related to the Management and Maintenance (including periodic evaluation) of the road network under contract. It includes carrying out **Rehabilitation Works** to bring the Road up to pre-defined standards, **Improvement** Works specified by the Employer aiming at adding new characteristics to the Roads in response to new traffic, safety or other conditions and Emergency Works needed to reinstate the Roads after damage has occurred as a result of natural phenomena with imponderable consequences (such as strong storms, flooding and earthquakes) under the conditions defined in the contract. A separate document has also been prepared and is presented as an Annex, providing "Sample Specifications for OPCR," these are mostly geared towards the Management and Maintenance of a variety of road types and will facilitate the preparation of actual and specific Specifications which must be part of the final bidding documents.
- 2. This preface summarizes the concept of **Output- and Performance-based Road Contracts (OPRC)**. For legal purposes the text of the main body of this document is binding and takes precedence over this preface.
- 3. Output- and Performance-based contracting for Roads is designed to increase the efficiency and effectiveness of road asset management and maintenance. It should ensure that the physical condition of the roads under contract is adequate for the need of road users, over the entire period of the contract which is normally several years. This type of contract significantly expands the role of the private sector, from the simple execution of works to the management and conservation of road assets.
- 4. In **traditional road construction and maintenance contracts**, the Contractor is responsible for the execution of works which are normally defined by the Road Administration or the Employer, and the Contractor is paid on the basis of unit prices for different work items, i.e. a contract based on "inputs" to the works. The results of traditional road contracts are in many cases less-than-optimal. The problem is that the Contractor has the wrong incentive, which is to carry out the maximum amount of works, in order to maximize its turnover and profits. Even if the work is carried out according to plan and much money is spent, the overall service quality for the road user depends on the quality of the design given to the Contractor who is not accountable for it. In many cases the roads do not last as long as they should because of deficiencies in the original design, aggravated by inadequate maintenance.

- 5. The **OPRC** addresses the issue of inadequate incentives. During the bidding process, contractors compete among each other by essentially proposing fixed lump-sum prices for bringing the road to a certain service level and then maintaining it at that level for a relatively long period. It is important to understand that contractors are not paid directly for "inputs" or physical works (which they will undoubtedly have to carry out), but for achieving specified Service Levels, i.e., the Rehabilitation of the road to pre-defined standards (if so required by the bidding documents), the maintenance service of ensuring certain Service Levels on the roads under contract, and specific improvements (if so required by the bidding documents), all representing outputs or outcomes. A monthly lump-sum remuneration paid to the Contractor will cover all physical and non-physical maintenance services provided by the Contractor, except for unforeseen emergency works which are remunerated separately. The Rehabilitation and Improvement Works which have been explicitly specified by the Employer in the contract are quoted on the basis of measurable output quantities and paid as performed. In order to be entitled to the monthly payment for maintenance services, the Contractor must ensure that the roads under contract comply with the Service Levels which have been specified in the bidding document. It is possible that during some months he will have to carry out a rather large amount of physical works in order to comply with the required Service Levels and very little work during other months. However, his monthly payment remains the same as long as the required Service Levels are complied with.
- 6. A fundamental feature of the OPRC is that the "Contractor" must not necessarily and in all cases be a traditional works contractor, but can (if allowed in the Bidding Documents) be any type of firm or business venture having the necessary technical, managerial and financial capacity to fulfill the contract. In any case, the contractor is responsible for designing and carrying out the works, services and actions he believes are necessary in order to achieve and maintain the Service Levels stated in the contract. The Service Levels are defined from a road user's perspective and may include factors such as average travel speeds, riding comfort, safety features, etc. If the Service Level is not achieved in any given month, the payment for that month may be reduced or even suspended.
- 7. Under the OPRC, the Contractor has a strong financial incentive to be both efficient and effective whenever he undertakes work. In order to maximize profits, he must reduce his activities to the smallest possible volume of intelligently designed interventions, which nevertheless ensure that pre-defined indicators of Service Level are achieved and maintained over time. This type of contract makes it necessary for the Contactor to have a good management capacity. Here, "management" means the capability to define, optimize and carry out on a timely basis the physical interventions which are needed in the short, medium and long term, in order to guarantee that the roads remain above the agreed Service Levels. In other words, within the contract limitations and those required to comply with local legislation, technical and performance specifications and environmental and social regulations, the Contractor is entitled to independently define: (i) what to do, (ii) where to do it, (iii) how to do it, and (iv) when to do it. The role of the Road Administration and of the Employer is to enforce the contract by verifying compliance with the agreed Service Levels and with all applicable legislation and regulations.
- 8. Maintaining a road network includes both **routine** and **periodic** tasks. Routine maintenance consists of many different tasks frequently necessary to maintain the function of the road (such as pothole repairs, cleaning of drainage, sealing of cracks, cutting of vegetation, etc.). Periodic maintenance consists of predictable and more costly measures of a less frequent nature

designed to avoid road degradation (such as grading, drainage work, resurfacing, asphaltic concrete overlays, etc.). Intelligent management, the timeliness of interventions and the adequacy of technical solutions are critical. It is expected that the use of private specialized firms under output- and performance-based contracts will unleash significant efficiency gains, and stimulate innovation in comparison with traditional road administration practices.

- 9. Minimum road conditions and Service Levels are defined through output and performance measures, and these are used under the OPRC to define and measure the desired performance of the Contractor. In the OPRC, the defined performance measures are thus the accepted minimum thresholds for the quality levels of the roads for which the Contractor is responsible.
- 10. The performance criteria should ideally cover all aspects of the contract and take account of the fact that different sub-areas within the contract area might require different Service Levels. Criteria can be defined at three levels (although simpler contracts will not use all of the criteria identified below):
- (a) **Road User Service and Comfort** measures, which can be expressed in terms such as:
 - Road Roughness
 - Road and lane width
 - Rutting
 - Skid resistance
 - Vegetation control
 - Visibility of road signs and markings
 - Availability of each lane-km for use by traffic
 - Response times to rectify defects that compromise the safety of road users
 - Attendance at road accidents
 - Drainage off the pavement (standing water is dangerous for road users)
- (b) **Road Durability** measures, which can be expressed in terms such as:
 - Longitudinal profile
 - Pavement strength
 - The extent of repairs permissible before a more extensive periodic maintenance treatment is required
 - Degree of sedimentation in drainage facilities
- (c) **Management Performance Measures**, which define the information the Employer requires both to govern the asset during the term of the contract, and to facilitate the next tender round. Requirements should include:
 - Delivery of regular progress reports to the Road Controlling Authority
 - Inventory updates and other data sharing requirements
 - Maintenance history (so subsequent tenderers can price the work).

To avoid ambiguity, all performance measures must be clearly defined and objectively measurable.

- 11. Together the performance measures define the minimum acceptable Service Level for the particular road. In setting the measures various criteria (both technical and practical) need to be carefully considered, such as (i) traffic volume and composition, (ii) urban vs. rural roads (iii) flat, hilly or mountainous terrain, (iv) subgrade quality and type, (v) quality of available construction materials, (vi) capacity of available contractors, (vii) any environmental constraints, such as protected areas, parks, forest reserves, etc. **However, probably the most important criterion is the question of what Service Level can be afforded and economically justified for the road in question.** [Guidance on Service Levels for Unpaved Roads can be found in the World Bank's "*Draft Infrastructure Note: Economically Justified Level of Service of Unpaved Roads*", Rodrigo Archondo-Callao, January 2004]
- 12. Under the terms of the contract, the Contractor will also be responsible for the continuous monitoring and control of road conditions and Service Levels for all roads or road sections included in the contract. This will not only be necessary to fulfill the contract requirements, but it is an activity which will provide him with the information needed to be able (i) to know the degree of his own compliance with Service Level requirements, and (ii) to define and plan, in a timely fashion, all physical interventions required to ensure that service quality indicators never fall below the indicated thresholds. Under the OPRC modality, the Contractor will not receive instructions from the Employer concerning the type and volume of road maintenance works to be carried out. Instead, all initiative rests with the Contractor who must do whatever is necessary and efficient to achieve the quality levels required. This concept is expected to lead not only to significant efficiency gains, as mentioned earlier, but also to technological innovation.
- 13. The beneficiaries of the new concept are expected to be the road users, the Road Administration, and the contractors or other private sector enterprises. In a wider sense, future generations will be able to benefit from a better preservation of past investments in roads. Road users will be able to know the Service Level they can expect in return for the payments they make for the use of the infrastructure (tolls, tariffs, user fees, taxes, etc.). The Road Administrations should benefit by obtaining better overall road conditions at the same levels of expenditure. For contractors and other private sector enterprises, the new type of contracts should open up new business opportunities, in which longer contract periods provide a more stable business environment, and for the establishment of true Public-Private Partnership relations. However, it may be the future generations who will perhaps benefit most, since they will not have to pay for the reconstruction of roads destroyed because of a lack of maintenance today.
- 14. Although the design of the works and services to be carried out is under the responsibility of the Contractor, this type of procurement requires good preparatory engineering work. It is necessary to prepare comprehensive information on the actual condition of the roads covered by the contract. If rehabilitation works are required, the Employer should define the level of quality (or standard) to be achieved by the Contractor for delivery and completion during the contract. If improvement works are sought, a well-designed bill of quantities defining specific outputs for bidders to price and, later on, allow measurement and payment of the Contractor, is of paramount importance. Emergency works, although impossible to quantify in advance, will certainly be necessary. To allow bidders to offer prices for Emergency Works, a unit price bill of quantities (similar for civil works under unit prices) with quantity estimates should be prepared for bidders to price for bid evaluation purposes. Later on, these unit prices and real measured

volumes of Emergency Works executed will be used for payments. Another important area requiring sound engineering advice is to define if the Rehabilitation Works should be included in the contract or be carried out in advance under a separate "standard" civil works contract. This decision depends in each case on the risks that the Borrower (and his advisor) understands as possible to be administered cost-effectively by the Contractor. In general, if those initial works represent more than 40-50% of the contract value, the risks may be too high and an initial separate contract may be warranted. However, if the Employer wants to have Rehabilitation Works based on a pre-defined design and use this document to connect it to future maintenance by the same Contractor, the documents need to be adapted. In this case, the bill of quantities for Rehabilitation Works should be modified to become similar to those for emergency works and the measurement and payment clauses should be modified for an "input" type contract.

- 15. When Rehabilitation Works and Improvement Works are not specifically required in the bidding documents, it is expected that in order to comply with the contract, the Contractor will most likely have to carry out different types of works, including some small initial rehabilitation and improvements, routine maintenance activities and periodic maintenance works. The definition of the exact nature of the works, their timing, their costing and their implementation is left to the judgment of the Contractor. This means that his capacity must be above the usual capacity of a traditional civil works contractor. In fact, an essential attribute is the capacity to manage roads, while the actual physical execution may either be carried out by the Contractor himself, or by different specialized firms participating in a Joint Venture with the main contractor, or under subcontracts. Joint Ventures may include Engineering firms and medium, small and even micro-enterprises. Consequently, a well-designed prequalification process is highly recommended in order to ensure that only qualified bidders participate in the bidding process, even though, the present bidding document can also be used when post-qualification is envisaged. In the design of the prequalification requirements the borrower should consider if the experience of specialist sub-contractors (like an engineering consultant) should be allowed to be added to those of the applicants. The activities which may be delegated by the main contractor to subcontractors not participating in the prequalification process should be listed in the Particular Conditions and bidders should be alerted about this point in the Bid Data Sheet.
- 16. Output- and Performance-based Road Contracts transfer a significant burden of risk onto the contractor. It is important that this burden is both equitable and within the capacity of the industry. The contract defines the risk profile carried by the contractor arising from storm events, legislation changes, changes in traffic volumes, and roadside development.
- 17. Some emergency works should always be foreseen. Those are meant to remedy unexpected damage which occurs as a result of extraordinary natural phenomena, and which affect the normal use of the road network, or the safety and security of the users. For emergency works, the contract limits the responsibility of the Contractor, establishing that the Employer will approve execution of services and separate remuneration based on specific amounts proposed by the Contractor for each case, on the basis of volume of works estimated at each time and on unit prices included in the bid and in the contract. A provisional sum is normally set aside for emergency works.
- 18. The Contractor should be entitled to implement an axle load control system, based on the legislation and in cooperation with local police authorities.
- 19. Bidders will present their financial offer for:

- the **Maintenance Services** in the form of the amount of the monthly lump-sum payment demanded by the bidder according to the conditions of contract (this will be a monthly amount applicable throughout the duration of the contract);
- the **Rehabilitation Works** (if so required in the Bid Data Sheet), in the form of a lumpsum amount, while indicating the quantities of measurable outputs to be executed in order that the road achieves the performance standards specified in the bidding documents. Payments will be made in accordance with the progress in the execution of those measured outputs;
- the **Improvement Works** (if so required and for the improvements indicated in the bidding documents) in the form of unit prices for outputs of each type of improvement works; payments for improvements will be made in accordance with quoted unit prices for those outputs; and
- unit prices for **Emergency Works** in the form of a traditional bill of quantities. Payments will be made for each emergency on a case-by-case basis, in the amount of a lump-sum value estimated by the Contractor and approved by the Employer, on the basis of the estimated quantities and on the quoted unit process.

There should also be a price adjustment clause applicable to all prices and activities in order to compensate for increases in cost indices.

20. The agreed monthly payment for maintenance works and services will be made to the Contractor if he has complied, during the month for which the payment is to be made, with the agreed Service Levels on the road network under contract. Together with his monthly invoice, the Contractor will report the result of his own evaluation of compliance with the required Service Levels, based on his own monitoring system which is mandatory. His statement will then be verified by the Employer or his representative (supervision consultant) through inspections. If the Service Levels are not met, payments are reduced, based on a schedule given in the contract. Payments may even be suspended, and the contract cancelled, if the contractor fails during an extended period to achieve certain minimum thresholds values of Service Levels. The contract describes the formulas used to calculate payment reduction and potential contract suspensions.

Those wishing to submit comments or questions on these Bidding Documents or to obtain additional information on procurement under World Bank-financed projects are encouraged to contact:

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Summary Description

These Sample Bidding Documents for **Procurement of Output- and Performance-based Road Contracts (OPRC)** apply either when a prequalification process has taken place before bidding or when a prequalification process has not taken place before bidding (provided alternative documents should be selected as applicable). A brief description of these documents is given below.

Sample Bidding Documents for Procurement of Works and Services under OPRC

Summary

PART 1 – BIDDING PROCEDURES

Section I: Instructions to Bidders (ITB)

This Section provides relevant information to help Bidders prepare their bids. Information is also provided on the submission, opening, and evaluation of bids and on the award of Contracts. Section I contains provisions that are to be used without modification.

Section II. Bid Data Sheet (BDS)

This Section consists of provisions that are specific to each procurement and that supplement the information or requirements included in Section I, Instructions to Bidders.

Section III. Evaluation and Qualification Criteria (alternative Section III to be used when Prequalification has taken place before bidding)

This Section contains the criteria to determine the lowest evaluated bid and to ascertain the continued qualification of the Bidder to perform the contract.

Section III. Evaluation and Qualification Criteria (alternative Section III to be used when Prequalification has not taken place before bidding)

This Section contains the criteria to determine the lowest evaluated bid and the qualifications of the Bidder to perform the contract.

Section IV: Bidding Forms

This Section contains the forms which are to be completed by the Bidder and submitted as part of his Bid.

Section V. Eligible Countries

This Section contains information regarding eligible countries.

PART 2 – WORKS REQUIREMENTS

Section VI. Specifications for OPRC

This Section contains the Specification, the Drawings, and supplementary information that describe the Services and Works to be procured. The Specifications hasve to be prepared specifically for each contract to be procured. To facilitate this work, the Bank has provided a separate volume with *Sample Specifications for OPRC*.

PART 3 – CONDITIONS OF CONTRACT AND CONTRACT FORMS

Section VII. General Conditions (*GC*)

This Section contains the general clauses to be applied in all contracts. The text of the clauses in this Section shall not be modified.

Section VIII. Particular Conditions (*PC***)**

This Section consists of **Part A, Contract Data**, which contains data, and **Part B, Specific Provisions**, which contains clauses specific to each contract. The contents of this Section modify or supplement the General Conditions and shall be prepared by the Employer.

Section IX: Annex to the Particular Conditions - Contract Forms

This Section contains forms which, once completed, will form part of the Contract. The forms for **Performance Security** and **Advance Payment Security**, when required, shall only be completed by the successful Bidder after contract award.

Attachment: Invitation for Bids

An "Invitation for Bids" form is provided at the end of the Bidding Documents for information. For information, alternative "Invitation for Bids" forms are provided at the end of the Bidding Documents, as follows:.

- **A-1. Invitation for Bids Form** (alternative form to be used when Prequalification has taken place before bidding)
- **A-2.** Specific Procurement Notice/Invitation for Bids Form (alternative form to be used when Prequalification has not taken place before bidding)

ANNEX: SAMPLE SPECIFICATIONS FOR OPRC

BIDDING DOCUMENTS

for

Procurement of Works and Services

under

Output- and Performancebased Road Contract

for the following roads:

[insert identification of the Roads]

ICB No: [insert ICB number]

Project: [insert name of Project]

Employer: [insert name of Employer]

Table of Contents

PART 1 – Bidding Procedures	1
Section I. Instructions to Bidders	3
Section II. Bid Data Sheet	
Section III. Evaluation and Qualification Criteria (Following Prequalification).	37
Section III. Evaluation and Qualification Criteria (Without Prequalification)	
Section IV. Bidding Forms	53
Section V. Eligible Countries	83
PART 2 – Specifications	
Section VI. Specifications	87
PART 3 – Conditions of Contract and Contract Forms	89
Section VII. General Conditions (GC)	
Section VIII. Particular Conditions (PC)	
Section IX. Annex to the Particular Conditions - Contract Forms	161
Attachments: Forms of Invitation for Bid	173
Sample Specifications for OPRC	179

PART 1 – BIDDING PROCEDURES

Section I. Instructions to Bidders

Table of Clauses

A.	General.		5
	1.	Scope of Bid	5
	2.	Source of Funds	6
	3.	Corrupt Practices	6
	4.	Eligible Bidders	8
	5.	Eligible Materials, Equipment and Services	10
В.	Content	s of Bidding Document	11
	6.	Sections of Bidding Document	11
	7.	Clarification of Bidding Document, Site Visit, Pre-Bid Meeting	12
	8.	Amendment of Bidding Document	13
C.	Prepara	tion of Bids	13
	9.	Cost of Bidding	13
	10.	Language of Bid	13
	11.	Documents Comprising the Bid	13
	12.	Letter of Bid, and Schedules	14
	13.	Alternative Bids	14
	14.	Bid Prices and Discounts	15
	15.	Currencies of Bid and Payment	16
	16.	Documents Comprising the Technical Proposal	16
	17.	Documents Establishing the Qualifications of the Bidder	16
	18.	Period of Validity of Bids	16
	19.	Bid Security	17
	20.	Format and Signing of Bid	18
D.	Submiss	ion and Opening of Bids	19
	21.	Sealing and Marking of Bids	19
	22.	Deadline for Submission of Bids	19
	23.	Late Bids	20
	24.	Withdrawal, Substitution, and Modification of Bids	20
	25.	Bid Opening	20
E.	Evaluati	on and Comparison of Bids	22
	26.	Confidentiality	22
	27.	Clarification of Bids	22
	28.	Deviations, Reservations, and Omissions	22
	20	Determination of Pasponsivaness	23

30.	Nonmaterial Nonconformities	23
31.	Correction of Arithmetical Errors	24
32.	Conversion to Single Currency	24
33.	Margin of Preference	
34.	Evaluation of Bids	24
35.	Comparison of Bids	26
36.	Qualification of the Bidder	26
37.	Employer's Right to Accept Any Bid, and to Reject Any or All Bids	
F. Award	of Contract	27
38.	Award Criteria	27
39.	Notification of Award	27
40.	Signing of Contract	
41	Performance Security	28

Section I. Instructions to Bidders

A. General

1. Scope of Bid

- 1.1 In connection with the Invitation for Bids indicated in the Bid Data Sheet (BDS), the Employer, as indicated in the BDS, issues these Bidding Documents for the procurement of Works and Services as listed below for the award of an *Output- and Performance-based Road Contract (OPRC)*. The Works and Services under the OPRC will cover the Roads indicated in the BDS and will consist of:
 - (a) Maintenance Services or "Services" consisting of all interventions on the Roads which are to be carried out by the contractor in order to achieve and keep the Road performance standards defined by the Service Level included in the Specifications in Section VI of these Bidding Documents, and all activities related to the management and evaluation of the road network under contract.
 - (b) Rehabilitation Works, when requested in the BDS for the sections of the Road(s) indicated in the BDS, consisting of specific types of civil works described in the Specifications.
 - (c) Improvement Works, when requested in the BDS, consisting of a set of specific interventions indicated in the Specifications to add new characteristics to the Roads in response to existing or new traffic and safety or other considerations.
 - (d) Works consisting of activities needed to reinstate the Roads and reconstruct their structure or their right of way which has been damaged as a result of natural phenomena with imponderable consequences, such as strong storms, flooding, and earthquakes.

1.2 Throughout these Bidding Documents:

- (a) the term "in writing" means communicated in written form and delivered against receipt;
- (b) except where the context requires otherwise, words indicating the singular also include the plural and words indicating the plural also include the singular; and

(c) "day" means calendar day.

2. Source of Funds

- 2.1 The Borrower or Recipient (hereinafter called "Borrower") indicated in the BDS has applied for or received financing (hereinafter called "funds") from the International Bank for Reconstruction and Development or the International Development Association (hereinafter called "the Bank") toward the cost of the project named in the BDS. The Borrower intends to apply a portion of the funds to eligible payments under the contract(s) for which these Bidding Documents are issued.
- 2.2 Payments by the Bank will be made only at the request of the Borrower and upon approval by the Bank in accordance with the terms and conditions of the financing agreement between the Borrower and the Bank (hereinafter called the Loan Agreement), and will be subject in all respects to the terms and conditions of that Loan Agreement. No party other than the Borrower shall derive any rights from the Loan Agreement or have any claim to the funds. The Loan Agreement prohibits a withdrawal from the loan account for the purpose of any payment to persons or entities, or for any import of equipment, plant, or materials, if such payment or import is prohibited by a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations.

3. Corrupt Practices

- 3.1 The Bank requires that Borrowers (including beneficiaries of Bank loans), as well as Bidders, Suppliers, Contractors, and Consultants under Bank-financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the Bank:
 - (a) defines, for the purposes of this provision, the terms set forth below as follows:
 - (i) "corrupt practice" is the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence improperly the

¹ In this context, any action taken by a bidder, supplier, contractor, or a sub-contractor to influence the procurement process or contract execution for undue advantage is improper.

² "Another party" refers to a public official acting in relation to the procurement process or contract execution]. In this context, "public official" includes World Bank staff and employees of other organizations taking or reviewing procurement decisions.

actions of another party;

- (ii) "fraudulent practice" is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;
- (iii) "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
- (iv) "coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
- (v) "obstructive practice" is
 - (aa) deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation, or
 - (bb) acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under sub-clause 3.1(e) below.
- (b) will reject a proposal for award if it determines that the Bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive or

³ A "party" refers to a public official; the terms "benefit" and "obligation" relate to the procurement process or contract execution; and the "act or omission" is intended to influence the procurement process or contract execution.

⁴ "Parties" refers to participants in the procurement process (including public officials) attempting to establish bid prices at artificial, non competitive levels.

⁵ A "party" refers to a participant in the procurement process or contract execution.

- 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 engaged in corrupt, fraudulent, collusive or coercive practices during the procurement or the execution of that contract, without the Borrower having taken timely and appropriate action satisfactory to the Bank to remedy the situation;
- (d) will sanction a firm or individual, including declaring them ineligible, either indefinitely or for a stated period of time, to be awarded a Bank-financed contract if it at any time determines that they have, directly or 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 a provision be included in Bidding Documents and in contracts financed by a Bank Loan, requiring bidders, suppliers, contractors and consultants to permit the Bank to inspect their accounts and records and other documents relating to the Bid submission and contract performance and to have them audited by auditors appointed by the Bank.
- 3.2 Furthermore, Bidders shall be aware of the provision stated in Sub-Clause 15.6 of the Particular Conditions.

4. Eligible Bidders

- 4.1 A Bidder may be a natural person, private entity, government-owned entity—subject to ITB 4.6—or any combination of such entities supported by a letter of intent to enter into an agreement or under an existing agreement in the form of a joint venture or association (JVA). In the case of a joint venture or association:
 - (a) unless otherwise specified in the BDS, all partners shall be jointly and severally liable, and
 - (b) the JVA shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the partners of the JVA during the bidding process and, in the event the JVA is awarded the Contract, during contract execution.

- 4.2 A Bidder, and all parties constituting the Bidder, may have the nationality of any country as defined under the *Guidelines: Procurement under IBRD Loans and IDA Credits* (hereinafter referred to as the Guidelines), subject to the restrictions specified in Section V, Eligible Countries. A Bidder shall be deemed to have the nationality of a country if the Bidder is a citizen or is constituted, incorporated, or registered and operates in conformity with the provisions of the laws of that country. This criterion shall also apply to the determination of the nationality of proposed subcontractors or suppliers for any part of the Contract including related Services.
- 4.3 A Bidder shall not have a conflict of interest. All Bidders found to have a conflict of interest shall be disqualified. A Bidder may be considered to have a conflict of interest with one or more parties in this bidding process, if:
 - (c) they have controlling partners in common; or
 - (d) they receive or have received any direct or indirect subsidy from any of them; or
 - (e) they have the same legal representative for purposes of this bid; or
 - (f) they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another Bidder, or influence the decisions of the Purchaser regarding this bidding process; or
 - (g) a Bidder participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all Bids in which the party is involved. However, this does not limit the inclusion of the same subcontractor in more than one bid; or
 - (h) a Bidder participated as a consultant in the preparation of the design or technical specifications of the works that are the subject of the bid;
 - (i) a Bidder was affiliated with a firm or entity that has been hired (or is proposed to be hired) by the Employer or Borrower as Engineer for the contract.

- 4.4 A Bidder that has been determined to be ineligible by the Bank in relation to the Bank's Guidelines: Procurement under IBRD Loans and IDA Credits, the Bank's Guidelines: Selection and Employment of Consultants by World Bank Borrowers, or the Bank's Anti-Corruption Guidelines on Preventing and Combating Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants, shall not be eligible to be awarded a contract.
- 4.5 Government-owned entities in the Employer's country shall be eligible only if they can establish that they are legally and financially autonomous and operate under commercial law. Also, they shall not be dependent agencies of the Employer.
- 4.6 Bidders shall provide such evidence of their continued eligibility satisfactory to the Employer, as the Employer shall reasonably request.
- 4.7 Firms shall be excluded if:
 - (a) as a matter of law or official regulation, the Borrower's country prohibits commercial relations with that country, provided that the Bank is satisfied that such exclusion does not preclude effective competition for the supply of goods or related services required; or
 - (b) 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 prohibits any import of goods or contracting of Works or services from that country or any payments to persons or entities in that country.
- 4.8 This bidding is open only to prequalified Bidders, unless stated otherwise in the **BDS**.
- 5. Eligible Materials, Equipment, and Services
- 5.1 The materials, equipment and services to be supplied under the Contract and financed by the Bank may have their origin in any country subject to the restrictions specified in Section V, Eligible Countries, and all expenditures under the Contract will be limited to such materials, equipment, and services. At the Employer's request, Bidders may be required to provide evidence of the origin of materials, equipment and services.
- 5.2 For purposes of ITB 5.1 above, "origin" means the place where the materials and equipment are mined, grown, produced or manufactured, and from which the services are

provided. Materials and equipment are produced when, through manufacturing, processing, or substantial or major assembling of components, a commercially recognized product results that is substantially in its basic characteristics or in purpose or utility from its components.

B. Contents of Bidding Document

6. Sections of Bidding 6.1 Document

The Bidding Documents consist of Parts 1, 2, and 3, which include all the Sections indicated below, and should be read in conjunction with any Addenda issued in accordance with ITB 8.

PART 1 Bidding Procedures

- Section I. Instructions to Bidders (ITB)
- Section II. Bid Data Sheet (BDS)
- Section III. Evaluation Criteria and Qualification Criteria
- Section IV. Bidding Forms
- Section V. Eligible Countries

PART 2 Specifications for Works and Services

• Section VI. Specifications for Works and Services

PART 3 Conditions of Contract and Contract Forms

- Section VII. General Conditions (GC)
- Section VIII. Particular Conditions (PC)
- Section IX. Annex to the Particular Conditions -Contract Forms
- 6.2 The Invitation for Bids issued by the Employer is not part of the Bidding Document.
- 6.3 The Employer is not responsible for the completeness of the Bidding Documents and their addenda, if they were not obtained directly from the source stated by the Employer in the Invitation for Bids.
- 6.4 The Bidder is expected to examine all instructions, forms, terms, and specifications in the Bidding Document. Failure to furnish all information or documentation required by the Bidding Documents may result in the rejection of the bid.

7. Clarification of Bidding Document, Site Visit, Pre-Bid Meeting

- 7.1 A prospective Bidder requiring any clarification of the Bidding Document shall contact the Employer in writing at the Employer's address indicated in the BDS or raise his enquiries during the pre-bid meeting if provided for in accordance with ITB 7.4. The Employer will respond in writing to any request for clarification, provided that such request is received no later than twenty-one (21) days prior to the deadline for submission of bids. The Employer shall forward copies of its response to all Bidders who have acquired the Bidding Document in accordance with ITB 6.3, including a description of the inquiry but without identifying its source. Should the Employer deem it necessary to amend the Bidding Document as a result of a request for clarification, it shall do so following the procedure under ITB 8 and ITB 22.2.
- 7.2 The Bidder is required to visit and examine the Site of the Roads and its surroundings and obtain for itself and on its own responsibility all information that may be necessary for preparing the bid and entering into a contract for construction of the Works. The costs of visiting the Site shall be at the Bidder's own expense.
- 7.3 The Bidder and any of its personnel or agents will be granted permission by the Employer to visit the Roads and surrounding lands for the purpose of such visit, but only upon the express condition that the Bidder, its personnel, and agents will release and indemnify the Employer and its personnel and agents from and against all liability in respect thereof, and will be responsible for death or personal injury, loss of or damage to property, and any other loss, damage, costs, and expenses incurred as a result of the inspection.
- 7.4 The Bidder's designated representative is required to attend a pre-bid meeting, **if provided for in the BDS**. The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.
- 7.5 The Bidder is requested, as far as possible, to submit any questions in writing, to reach the Employer not later than one week before the meeting.
- 7.6 Minutes of the pre-bid meeting, including the text of the questions raised, without identifying the source, and the responses given, together with any responses prepared after the meeting, will be transmitted promptly to all Bidders who have acquired the Bidding Documents in accordance with

- ITB 6.3. Any modification to the Bidding Documents that may become necessary as a result of the pre-bid meeting shall be made by the Employer exclusively through the issue of an Addendum pursuant to ITB 8 and not through the minutes of the pre-bid meeting.
- 7.7 Nonattendance at the pre-bid meeting will not be a cause for disqualification of a Bidder.

8. Amendment of Bidding Document

- 8.1 At any time prior to the deadline for submission of bids, the Employer may amend the Bidding Documents by issuing addenda.
- 8.2 Any addendum issued shall be part of the Bidding Documents and shall be communicated in writing to all who have obtained the Bidding Document from the Employer in accordance with ITB 6.3.
- 8.3 To give prospective Bidders reasonable time in which to take an addendum into account in preparing their bids, the Employer may, at its discretion, extend the deadline for the submission of bids, pursuant to ITB 22.2

C. Preparation of Bids

9. Cost of Bidding

9.1 The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Employer shall not be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

10. Language of Bid

10.1 The Bid, as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Employer, shall be written in the language **specified in the BDS**. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages in the language **specified in the BDS**, in which case, for purposes of interpretation of the Bid, such translation shall govern.

11. Documents Comprising the Bid

- 11.1 The Bid shall comprise the following:
 - (a) Letter of Bid
 - (b) completed schedules as required, including priced Bills of Quantities, in accordance with ITB 12 and 14;
 - (c) Bid Security, in accordance with ITB 19;

- (d) alternative bids, if permissible, in accordance with ITB 13;
- (e) written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB 20.2:
- (f) documentary evidence in accordance with ITB 17 establishing the Bidder's qualifications to perform the contract if its Bid is accepted;
- (g) Technical Proposal in accordance with ITB 16; and
- (h) any other document required in the BDS.
- 11.2 In addition to the requirements under ITB 11.1, bids submitted by a JVA shall include a copy of the Joint Venture Agreement entered into by all partners. Alternatively, a Letter of Intent to execute a Joint Venture Agreement in the event of a successful bid shall be signed by all partners and submitted with the bid, together with a copy of the proposed agreement.

12. Letter of Bid, and Schedules

12.1 The Letter of Bid and Schedules, including the Bills of Quantities, shall be prepared using the relevant forms furnished in Section IV, Bidding Forms. The forms must be completed without any alterations to the text, and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested.

13. Alternative Bids

- 13.1 **Unless otherwise indicated in the BDS**, alternative bids shall not be considered.
- 13.2 When alternative times for reaching the required Service Levels or for the completion of Rehabilitation or Improvement Works are explicitly invited, a statement to that effect **will be included in the BDS**, as will the method of evaluating different times for completion.
- 13.3 Except as provided under ITB 13.4 below, Bidders wishing to offer technical alternatives to the requirements of the bidding document must first price the Employer's design as described in the bidding document and shall further provide all information necessary for a complete evaluation of the alternative by the Employer, including drawings, design calculations, technical specifications, breakdown of prices, and proposed construction methodology and other relevant details. Only the technical alternatives, if any, of the lowest

- evaluated Bidder conforming to the basic technical requirements shall be considered by the Employer.
- 13.4 When specified in the BDS, Bidders are permitted to submit alternative technical solutions for specified parts of the Rehabilitation and/or Improvement Works, and such parts will be identified in the BDS, as will the method for their evaluating, and described in Section VI, Work's Requirements.

14. Bid Prices and Discounts

- 14.1 The prices and discounts quoted by the Bidder in the Letter of Bid and in the Bills of Quantities shall conform to the requirements specified below.
- 14.2 The Bidder shall fill in rates and prices for all items of the Works and Services described in the Bills of Quantities. Items against which no rate or price is entered by the Bidder will not be paid for by the Employer when executed and shall be deemed covered by the rates for other items and prices in the Bills of Quantities.
- 14.3 The price to be quoted in the Letter of Bid, in accordance with ITB 12.1, shall be the total price of the Bid, excluding any discounts offered.
- 14.4 The Bidder shall quote any unconditional discounts and the methodology for their application in the Letter of Bid, in accordance with ITB 12.1.
- 14.5 Unless otherwise provided in the BDS and the Contract, the rates and prices quoted by the Bidder are subject to adjustment during the performance of the Contract in accordance with the provisions of the Conditions of Contract. In such a case, the Bidder shall furnish the indices and weightings for the price adjustment formulae in the Schedule of Adjustment Data and the Employer may require the Bidder to justify its proposed indices and weightings.
- 14.6 If so indicated in ITB 1.1, bids are being invited for individual lots (contracts) or for any combination of lots (packages). Bidders wishing to offer any price reduction for the award of more than one Contract shall specify in their bid the price reductions applicable to each package, or alternatively, to individual Contracts within the package. Price reductions or discounts shall be submitted in accordance with ITB 14.4, provided the bids for all lots

(contracts) are submitted and opened at the same time.

14.7 All duties, taxes, and other levies payable by the Contractor under the Contract, or for any other cause, as of the date 28 days prior to the deadline for submission of bids, shall be included in the rates and prices and the total Bid Price submitted by the Bidder.

15. Currencies of Bid and Payment

- 15.1 The currency(cies) of the bid shall be as specified in the BDS.
- 15.2 Bidders may be required by the Employer to justify, to the Employer's satisfaction, their local and foreign currency requirements, and to substantiate that the amounts included in the unit rates and prices and shown in the Summary of Payment Currency Schedule, in which case a detailed breakdown of the foreign currency requirements shall be provided by Bidders.

16. Documents Comprising the Technical Proposal

- 16.1 The Bidder shall furnish a Technical Proposal including a statement of work methods, equipment, personnel, schedule and any other information as stipulated in Section IV, in sufficient detail to demonstrate the adequacy of the Bidders' proposal to meet the requirements of Section VI, Specifications.
- 17. Documents
 Establishing the
 Qualifications of
 the Bidder
- 17.1 To establish its qualifications to perform the Contract in accordance with Section III, Evaluation and Qualification Criteria, the Bidder shall provide the information requested in the corresponding information sheets included in Section IV, Bidding Forms.
- 17.2 Domestic Bidders, individually or in joint ventures, applying for eligibility for domestic preference shall supply all information required to satisfy the criteria for eligibility as described in ITB 33.

18. Period of Validity of Bids

- 18.1 Bids shall remain valid for the period **specified in the BDS** after the bid submission deadline date prescribed by the Employer. A bid valid for a shorter period shall be rejected by the Employer as non responsive.
- 18.2 In exceptional circumstances, prior to the expiration of the bid validity period, the Employer may request Bidders to extend the period of validity of their bids. The request and the responses shall be made in writing. If a bid security is requested in accordance with ITB 19, it shall also be

extended for twenty-eight (28) days beyond the deadline of the extended validity period. A Bidder may refuse the request without forfeiting its bid security. A Bidder granting the request shall not be required or permitted to modify its bid, except as provided in ITB 18.3.

18.3 In the case of fixed price contracts, if the award is delayed by a period exceeding fifty-six (56) days beyond the expiry of the initial bid validity, the Contract price shall be adjusted by a factor specified in the request for extension. Bid evaluation shall be based on the Contract Price without taking into consideration the above correction.

19. Bid Security

- 19.1 **Unless otherwise specified in the BDS**, the Bidder shall furnish as part of its bid, a bid security in original form and in the amount and currency **specified in the BDS**.
- 19.2 The bid security shall be a demand guarantee at the Bidder's option, in any of the following forms:
 - (a) an unconditional bank guarantee;
 - (b) an irrevocable letter of credit;
 - (c) a cashier's or certified check; or
 - (d) another security indicated in the BDS,

from a reputable source from an eligible country. If the bid security furnished by the Bidder is in the form of a bond issued by an insurance or bonding institution located outside the Employer's Country, it shall have a correspondent financial institution located in the Employer's Country to make it enforceable. The bid security shall be submitted either using the Bid Security Form included in Section IV, Bidding Forms, in the case of a bank guarantee, or in another substantially similar format approved by the Employer prior to bid submission. In either case, the form must include the complete name of the Bidder. The bid security shall be valid for twenty-eight (28) days beyond the original validity period of the bid, or beyond any period of extension if requested under ITB 18.2.

19.3 Any bid not accompanied by an enforceable and compliant bid security, if one is required in accordance with ITB 19.1, shall be rejected by the Employer as non responsive.

- 19.4 The bid security of unsuccessful Bidders shall be returned as promptly as possible upon the successful Bidder's furnishing of the performance security pursuant to ITB 41.
- 19.5 The bid security of the successful Bidder shall be returned as promptly as possible once the successful Bidder has signed the Contract and furnished the required performance security.
- 19.6 The bid security may be forfeited:
 - (a) if a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Letter of Bid Form, except as provided in ITB 18.2 or
 - (b) if the successful Bidder fails to:
 - (i) sign the Contract in accordance with ITB 40; or
 - (ii) furnish a performance security in accordance with ITB 41.
- 19.7 The bid security of a JVA shall be in the name of the JVA that submits the bid. If the JVA has not been legally constituted at the time of bidding, the Bid Security shall be in the names of all future partners as named in the letter of intent referred to in ITB 4.1.
- 19.8 If a bid security is **not required in the BDS**, and
 - (a) if a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Letter of Bid Form, except as provided in ITB 18.2, or
 - (b) if the successful Bidder fails to:
 - (i) sign the Contract in accordance with ITB 40; or
 - (ii) furnish a performance security in accordance with ITB 41;

the Borrower may, **if provided for in the BDS**, declare the Bidder ineligible to be awarded a contract by the Borrower for a period of time **as stated in the BDS**.

20. Format and Signing of Bid

20.1 The Bidder shall prepare one original of the documents comprising the bid as described in ITB 11 and clearly mark it "ORIGINAL." Alternative bids, if permitted in accordance with ITB 13, shall be clearly marked "ALTERNATIVE." In addition, the Bidder shall submit copies of the bid, in the

- number **specified in the BDS** and clearly mark them "COPY." In the event of any discrepancy between the original and the copies, the original shall prevail.
- 20.2 The original and all copies of the bid shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Bidder. This authorization shall consist of a written confirmation as specified in the BDS and shall be attached to the bid. The name and position held by each person signing the authorization must be typed or printed below the signature. All pages of the bid where entries or amendments have been made shall be signed or initialed by the person signing the bid.
- 20.3 Any inter-lineation, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the bid.

D. Submission and Opening of Bids

21. Sealing and Marking of Bids

- 21.1 The Bidder shall enclose the original and all copies of the bid, including alternative bids, if permitted in accordance with ITB 13, in separate sealed envelopes, duly marking the envelopes as "ORIGINAL," "ALTERNATIVE," and "COPY." These envelopes containing the original and the copies shall then be enclosed in one single envelope.
- 21.2 The inner and outer envelopes shall:
 - (a) bear the name and address of the Bidder;
 - (b) be addressed to the Employer in accordance with ITB 22.1;
 - (c) bear the specific identification of this bidding process indicated in the BDS 1.1; and
 - (d) bear a warning not to open before the time and date for bid opening.
- 21.3 If all envelopes are not sealed and marked as required, the Employer will assume no responsibility for the misplacement or premature opening of the bid.

22. Deadline for Submission of Bids

22.1 Bids must be received by the Employer at the address and no later than the date and time **indicated in the BDS**. When so specified in the BDS, bidders shall have the option of submitting their bids electronically. Bidders submitting bids electronically shall follow the electronic bid submission

procedures **specified** in the BDS.

22.2 The Employer may, at its discretion, extend the deadline for the submission of bids by amending the Bidding Document in accordance with ITB 8, in which case all rights and obligations of the Employer and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.

23. Late Bids

- 23.1 The Employer shall not consider any bid that arrives after the deadline for submission of bids, in accordance with ITB 22. Any bid received by the Employer after the deadline for submission of bids shall be declared late, rejected, and returned unopened to the Bidder.
- 24. Withdrawal, Substitution, and Modification of Bids
- 24.1 A Bidder may withdraw, substitute, or modify its bid after it has been submitted by sending a written notice, duly signed by an authorized representative, and shall include a copy of the authorization in accordance with ITB 20.2, (except that withdrawal notices do not require copies). The corresponding substitution or modification of the bid must accompany the respective written notice. All notices must be:
 - (a) prepared and submitted in accordance with ITB 20 and ITB 21 (except that withdrawals notices do not require copies), and in addition, the respective envelopes shall be clearly marked "WITHDRAWAL," "SUBSTITUTION," "MODIFICATION;" and
 - (b) received by the Employer prior to the deadline prescribed for submission of bids, in accordance with ITB 22.
- 24.2 Bids requested to be withdrawn in accordance with ITB 24.1 shall be returned unopened to the Bidders.
- 24.3 No bid may be withdrawn, substituted, or modified in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the Letter of Bid Form or any extension thereof.

25. Bid Opening

25.1 The Employer shall open the bids in public, in the presence of Bidders` designated representatives and anyone who choose to attend, and at the address, date and time **specified** in the BDS. Any specific electronic bid opening procedures required if electronic bidding is permitted in accordance with

ITB 22.1, shall be as specified in the BDS.

- 25.2 First, envelopes marked "WITHDRAWAL" shall be opened and read out and the envelope with the corresponding bid shall not be opened, but returned to the Bidder. No bid withdrawal shall be permitted unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal and is read out at bid opening. envelopes marked "SUBSTITUTION" shall be opened and read out and exchanged with the corresponding bid being substituted, and the substituted bid shall not be opened, but returned to the Bidder. No bid substitution shall be permitted unless the corresponding substitution notice contains a valid authorization to request the substitution and is read out at bid opening. Envelopes marked "MODIFICATION" shall be opened and read out with the corresponding bid. No bid modification shall be permitted unless the corresponding modification notice contains a valid authorization to request the modification and is read out at bid opening. Only envelopes that are opened and read out at bid opening shall be considered further.
- 25.3 All other envelopes shall be opened one at a time, reading out: the name of the Bidder and whether there is a modification; the Bid Price(s), including any discounts and alternative offers; the presence of a bid security, if required; and any other details as the Employer may consider appropriate. Only discounts and alternative offers read out at bid opening shall be considered for evaluation. **If so requested by the Employer in the BDS**, the Letter of Bid and the Bill of Quantities are to be initialed by representatives of the Employer attending bid opening in the manner indicated in the BDS. No bid shall be rejected at bid opening except for late bids, in accordance with ITB 23.1.
- 25.4 The Employer shall prepare a record of the bid opening that shall include, as a minimum: the name of the Bidder and whether there is a withdrawal, substitution, or modification; the Bid Price, per lot if applicable, including any discounts and alternative offers; and the presence or absence of a bid security, if one was required. The Bidders' representatives who are present shall be requested to sign the record. The omission of a Bidder's signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to all Bidders.

E. Evaluation and Comparison of Bids

26. Confidentiality

- 26.1 Information relating to the evaluation of bids and recommendation of contract award shall not be disclosed to Bidders or any other persons not officially concerned with such process until information on Contract award is communicated to all Bidders.
- 26.2 Any attempt by a Bidder to influence the Employer in the evaluation of the bids or Contract award decisions may result in the rejection of its bid.
- 26.3 Notwithstanding ITB 26.2, from the time of bid opening to the time of Contract award, if any Bidder wishes to contact the Employer on any matter related to the bidding process, it may do so in writing.

27. Clarification of Bids

- 27.1 To assist in the examination, evaluation, and comparison of the bids, and qualification of the Bidders, the Employer may, at its discretion, ask any Bidder for a clarification of its bid. Any clarification submitted by a Bidder that is not in response to a request by the Employer shall not be considered. The Employer's request for clarification and the response shall be in writing. No change in the prices or substance of the bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the bids, in accordance with ITB 31.
- 27.2 If a Bidder does not provide clarifications of its bid by the date and time set in the Contracting Agency's request for clarification, its bid may be rejected.

28. Deviations, Reservations, and Omissions

- 28.1 During the evaluation of bids, the following definitions apply:
 - (a) "Deviation" is a departure from the requirements specified in the Bidding Document;
 - (b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Bidding Document; and
 - (c) "Omission" is the failure to submit part or all of the information or documentation required in the Bidding Document.

29. Determination of Responsiveness

- 29.1 The Employer's determination of a bid's responsiveness is to be based on the contents of the bid itself, as defined in ITB11.
- 29.2 A substantially responsive bid is one that meets the requirements of the Bidding Document without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that,
 - (a) if accepted, would
 - affect in any substantial way the scope, quality, or performance of the Works specified in the Contract;
 or
 - (ii) limit in any substantial way, inconsistent with the Bidding Document, the Employer's rights or the Bidder's obligations under the proposed Contract; or
 - (b) if rectified, would unfairly affect the competitive position of other Bidders presenting substantially responsive bids.
- 29.3 The Employer shall examine the technical aspects of the bid submitted in accordance with ITB 16, Technical Proposal, in particular, to confirm that all requirements of Section VI, Specifications have been met without any material deviation or reservation.
- 29.4 If a bid is not substantially responsive to the requirements of the Bidding Document, it shall be rejected by the Employer and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.

30. Nonmaterial Nonconformities

- 30.1 Provided that a bid is substantially responsive, the Employer may waive any nonconformities in the bid that do not constitute a material deviation, reservation or omission.
- 30.2 Provided that a bid is substantially responsive, the Employer may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities in the bid related to documentation requirements. Requesting information or documentation on such nonconformities shall not be related to any aspect of the price of the bid. Failure of the Bidder to comply with the request may result in the

rejection of its bid.

30.3 Provided that a bid is substantially responsive, the Employer shall rectify nonmaterial nonconformities related to the Bid Price. To this effect, the Bid Price shall be adjusted, for comparison purposes only, to reflect the price of a missing or non-conforming item or component. The adjustment shall be made using the method indicated in Section III, Evaluation and Qualification Criteria.

31. Correction of Arithmetical Errors

- 31.1 Provided that the bid is substantially responsive, the Employer shall correct arithmetical errors on the following basis:
 - (a) if there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected, unless in the opinion of the Employer there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price shall be corrected;
 - (b) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
 - (c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) and (b) above.
- 31.2 If the Bidder that submitted the lowest evaluated bid does not accept the correction of errors, its bid shall be disqualified.

32. Conversion to Single Currency

- 32.1 For evaluation and comparison purposes, the currency(ies) of the bid shall be converted into a single currency as specified in the BDS.
- 33. Margin of Preference
- 33.1 **Unless otherwise specified in the BDS**, a margin of preference shall not apply.
- 34. Evaluation of Bids
- 34.1 The Employer shall use the criteria and methodologies listed in this Clause. No other evaluation criteria or methodologies shall be permitted.

- 34.2 To evaluate a bid, the Employer shall consider the following:
 - (a) the bid price, excluding Provisional Sums and the provision, if any, for contingencies in the Summary Bill of Quantities;
 - (b) price adjustment for correction of arithmetic errors in accordance with ITB 31.1;
 - (c) price adjustment due to discounts offered in accordance with ITB 14.4;
 - (d) converting the amount resulting from applying (a) to (c) above, if relevant, to a single currency in accordance with ITB 32;
 - (e) adjustment for nonconformities in accordance with ITB 30.3;
 - (f) the evaluation factors indicated in Section III, Evaluation and Qualification Criteria;
- 34.3 The estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be taken into account in bid evaluation.
- 34.4 If these Bidding Documents allows Bidders to quote separate prices for different lots (contracts), and the award to a single Bidder of multiple lots (contracts), the methodology to determine the lowest evaluated price of the lot (contract) combinations, including any discounts offered in the Letter of Bid Form, is specified in Section III, Evaluation and Oualification Criteria.
- 34.5 If the bid, which results in the lowest Evaluated Bid Price, is seriously unbalanced or front loaded in the opinion of the Employer, the Employer may require the Bidder to produce detailed price analyses for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analyses, taking into consideration the schedule of estimated Contract payments, the Employer may require that the amount of the performance security be increased at the expense of the Bidder to a level sufficient to protect the Employer against financial loss in the event of default of the successful Bidder

under the Contract.

34.6 The price of the Rehabilitation and Improvement Works included in each bid shall not be higher than the threshold **indicated in the BDS**. If the Bidder estimates that its costs for the Rehabilitation and Improvement Works are higher than the threshold indicated in the BDS, it shall include the portion above the threshold in its price for the Maintenance Services. If the bid which results in the lowest Evaluated Bid Price is above the threshold indicated in the BDS for the Rehabilitation and Improvement Works, the Employer may reject the bid.

35. Comparison of Bids

- 35.1 The Employer shall compare all substantially responsive bids to determine the lowest evaluated bid, in accordance with ITB 34.2.
- 35.2 After application of the criteria established in Sub-Clauses 34.1 to 34.6, the Evaluated Bid Price for comparison of bids will be:
 - (a) The lump-sum price offered by the Bidder for the Maintenance Services; plus
 - (b) The lump-sum price offered by the Bidder for the Rehabilitation Works, if the bidding documents require prices for this type of works; plus
 - (c) The total price of the priced Bill of Quantities for the Improvement Works, if the bidding documents require prices for this type of works, plus
 - (d) The total price of the priced_Bill of Quantities for the Emergency Works.

36. Qualification of the Bidder

- 36.1 The Employer shall determine to its satisfaction whether the Bidder that is selected as having submitted the lowest evaluated and substantially responsive bid meets the qualifying criteria specified in Section III, Evaluation and Qualification Criteria.
- 36.2 The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB 17.1.
- 36.3 An affirmative determination shall be a prerequisite for award of the Contract to the Bidder. A negative determination shall result in disqualification of the bid, in which event the Employer shall proceed to the next lowest

evaluated bid to make a similar determination of that Bidder's qualifications to perform satisfactorily.

37. Employer's Right to Accept Any Bid, and to Reject Any or All Bids

37.1 The Employer reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to contract award, without thereby incurring any liability to Bidders. In case of annulment, all bids submitted and specifically, bid securities, shall be promptly returned to the Bidders.

F. Award of Contract

38. Award Criteria

38.1 The Employer shall award the Contract to the Bidder whose offer has been determined to be the lowest evaluated bid and is substantially responsive to the Bidding Document, provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily.

39. Notification of Award

- 39.1 Prior to the expiration of the period of bid validity, the Employer shall notify the successful Bidder, in writing, that its bid has been accepted. The notification letter (hereinafter and in the Conditions of Contract and Contract Forms called the "Letter of Acceptance") shall specify the sum that the Employer will pay the Contractor in consideration of the execution and completion of the Works (hereinafter and in the Conditions of Contract and Contract Forms called "the Contract Price") and the requirement for the Contractor to remedy any defects therein as prescribed by the Contract. At the same time, the Employer shall also notify all other Bidders of the results of the bidding and shall publish in UNDB online and in the dgMarket the results identifying the bid and lot numbers and the following information: (i) name of each Bidder who submitted a Bid; (ii) bid prices as read out at Bid Opening; (iii) name and evaluated prices of each Bid that was evaluated; (iv) name of bidders whose bids were rejected and the reasons for their rejection; and (v) name of the winning Bidder, and the Price it offered, as well as the duration and summary scope of the contract awarded.
- 39.2 Until a formal contract is prepared and executed, the notification of award shall constitute a binding Contract.
- 39.3 The Employer shall promptly respond in writing to any unsuccessful Bidder who, after notification of award in accordance with ITB 39.1, requests in writing the grounds on

which its tender was not selected.

40. Signing of Contract

- 40.1 Promptly after notification, the Employer shall send the successful Bidder the Contract Agreement.
- 40.2 Within twenty-eight (28) days of receipt of the Contract Agreement, the successful Bidder shall sign, date, and return it to the Employer.

41. Performance Security

- 41.1 Within twenty-eight (28) days of the receipt of notification of award from the Employer, the successful Bidder shall furnish the performance security in accordance with the conditions of contract, subject to ITB 34.5, using for that purpose the Performance Security Form included in Section IX, Annex to the Particular Conditions Contract Forms, or another form acceptable to the Employer. If the performance security furnished by the successful Bidder is in the form of a bond, it shall be issued by a bonding or insurance company that has been verified by the successful Bidder to be acceptable to the Employer. A foreign institution providing a bond shall have a correspondent financial institution located in the Employer's Country.
- 41.2 Failure of the successful Bidder to submit the abovementioned Performance Security or sign the Contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security. In that event the Employer may award the Contract to the next lowest evaluated Bidder whose offer is substantially responsive and is determined by the Employer to be qualified to perform the Contract satisfactorily.

Note: Section II, Bid Data Sheet, shall be filled in by the Employer before issuance of the bidding documents [Instructions are provided below as needed, in italics].

ITB Clause Reference	Bid Data				
	A. Introduction				
ITB 1.1	The number of the Invitation for Bids is :[Insert				
	number of the Invitation for Bids]				
ITB 1.1	The Employer is:				
	of the Employer]				
ITB 1.1	The name of the ICB is:				
	name of the ICB]				
	The identification number of the ICB is:[Insert				
	number of the ICB]				
	[The following text is to be included and the corresponding information inserted <u>only</u> if the contract is to be bid simultaneously with other contracts on a "slice and package" basis. Otherwise omit.]				
	The number and identification of lots (contracts) comprising this ICB is:				
	[Insert number and identification of lots (contracts)]				
ITB 1.1	The Roads are:[Insert identification of the Roads covered under the contract]				
ITB 1.1	Rehabilitation Works are required. [Insert "are" or "are not" as appropriate].				
	The sections of the Road(s) subject to Rehabilitation Works are:				
ITB 1.1	Improvement Works are required. [Insert "are" or "are not" as appropriate]				

ITB 2.1	The Borrower is: [Insert name of the Borrower and statement of relationship with the Employer, if different from the Borrower. This insertion should correspond to the information provided in the Invitation for Bids]		
ITB 2.1	The name of the Project is:		
	name of the project]		
[The following provision should be included and the confirmation inserted only if partners of a JVA will not be responsible to the provision of the confirmation inserted only if partners of a JVA will not be responsible to the provision of the confirmation inserted only if partners of a JVA will not be responsible to the confirmation of the confirmation inserted only in the confirmation in the confirm			
	The individuals or firms in a joint venture or association [insert "shall not be"] jointly and severally liable.		
ITB 4.8	[In exceptional cases where prequalification has not taken place, indicate that bidding is open to all interested bidders.]		
	B. Bidding Documents		
ITB 7.1	For clarification purposes only, the Employer's address is: [Insert the corresponding information as required below. This address may be the same as or different from that specified under provision ITB 22.1 for bid submission] Attention: Street Address: Floor/Room number: City: ZIP Code: Country: Telephone: Facsimile number: Electronic mail address:		
ITB 7.4	A Pre-Bid meeting [insert "will" and insert the date, time and place information in the spaces provided below if a pre-bid meeting will take place, taking into consideration that the meeting should take place no later than four weeks before the deadline for bid submission. Otherwise, insert "will not" and insert "Not Applicable" in the spaces provided below for the date, time and place] take place at the following date, time and place: Date: Time: Place:		

	A site visit conducted by the Employer [insert "will be" or "will not be", as appropriate] organized.			
C. Preparation of Bids				
ITB 10.1	The language of the bid is: [Insert "English" or "Spanish" or "French"].			
	[In Countries that the Bank has agreed with the Borrower that in addition to one of the three languages above, bidding documents may be prepared and bids may be submitted in the national language of the Borrower's Country (or the language used nation-wide in the Borrower's Country for commercial transactions), the following text shall be added:]			
	In addition to the above indicated language, these Bidding Documents have been issued in the following language [insert the language of the Borrower's Country or the language used nation-wide in the Borrower's Country for commercial transactions]. Bidders are permitted, at their choice, to submit their bids in one of the two languages above indicated. Bidders shall not submit bids in more than one language. The Contract to be signed with the winning Bidder shall be written in the language in which the Bid was submitted, which shall be the language that shall govern the contractual relations between the Purchaser and the winning Bidder. A Bidder shall not sign a translated version of its Contract.			
ITB 11.1 (h)	The Bidder shall submit with its bid the following additional documents: [List the additional documents]:			
ITB 13.1	[The following provision should be included and the required corresponding information inserted only if alternative bids will be considered. Otherwise omit.]			
ITB 13.2	Alternative bids [insert "shall be"] permitted. Alternative times for reaching the required Service Levels and for the completion of the Rehabilitation and/or Improvement Works [insert "will be" or "will not be", as appropriate] permitted. [Alternative times for completion should be permitted when the Employer sees potential net benefits in different times for completion; they also have merit for contracts bid on a "slice and package" basis.] If alternative times for completion are permitted, the evaluation method will be as specified in Section III, Evaluation and Qualification Criteria.			
ITB 13.4	Alternative technical solutions for the Rehabilitation and/or Improvement Works shall be permitted for the following parts of the Works:			

	[List the parts of the	
	works].	
	If alternative technical solutions are permitted, the evaluation method will be as specified in Section III, Evaluation and Qualification Criteria.	
ITB 14.5	[Price adjustment is mandatory for contracts expected to last more than 18 months. The following provision should be included and the required corresponding information inserted only if the prices quoted by the Bidder are not subject to price adjustment. Otherwise omit.]	
	The prices quoted by the Bidder shall be:	
ITB 15.1	The currency(ies) of the bid shall be as follows:[Insert name(s) of currency(ies)]	
ITB 18.1	The bid validity period shall be [Inser number of days after the deadline for bid submission] days.	
	[This period should be realistic, allowing sufficient time to evaluate the bids, bearing in mind the complexity of the Works and the time required for obtaining references, clarifications, clearances, and approvals (including the Bank's "No Objection") and for notification of the award. Normally the validity period should not exceed 182 days.]	
ITB 19.1	[The following provision should be included and the required corresponding information inserted <u>only</u> if a bid security will not be required. Otherwise omit.]	
	A bid security[insert "shall not be"] required.	
	If a bid security shall be required, the amount and currency of the bid security shall be:	
	[If a bid security is required, insert amount and currency of the bid security. Otherwise insert "Not Applicable".]	
ITB 19.2 (d)	Other types of acceptable securities:	
	[Insert names of other acceptable securities. Insert "None" if no bid security is required under provision ITB 19.1 or if bid security is required but no other forms of bid securities besides those listed in ITB 19.2 (a) through (c) are acceptable.]	
ITB 19.8	[The following provision should be included and the required corresponding information inserted <u>only</u> if a bid security is not required under provision ITB 19.1 and the Employer wishes to declare the Bidder ineligible for a period of time should the Bidder incur in the actions mentioned in provision ITB 19.8. Otherwise omit.]	

	The ineligibility period will be [insert period of time].			
ITB 20.1	In addition to the original of the bid, the number of copies is:[Inser			
	number of copies]			
ITB 20.2	The written confirmation of authorization to sign on behalf of the E shall consist of:[Insert the			
	the written confirmation of authorization should consist of.]			
	D. Submission and Opening of Bids			
For bid submission purposes only, the Employer's address is: [In corresponding information as required below. This address may same as or different from that specified under provision ITB clarifications] Attention:				
	Street Address:			
	Floor/Room number:			
	City:			
ZIP Code: Country:				
	The deadline for bid submission is: [insert date and time in the space, provided below]			
	Date:			
	Time:			
	[The date and time should be the same as those provided in the Invitation for Bids, unless subsequently amended pursuant to Clause 22.2.]			
	Bidders [insert "shall" or "shall not"] have the option of submitting their bids electronically.			
If bidders have the option of submitting their bids electron electronic bidding submission procedures shall be: [If "shall" above, insert a description of the electronic bidding submission procedures; otherwise insert "Not Applicable"]				
ITB 25.1	The bid opening shall take place at: [insert the corresponding information as required below]			
	Street Address:			
	Floor/Room number:			
	City:Country:			
1	- Commy.			

	Date:		
	Time:		
	[Date and time should be the same as those given for the deadline for submission of bids (Clause 22).]		
	If bidders have the option of submitting their bids electronically, the electronic bid opening procedures shall be: [If "shall" is inserted in ITB 22.1 above, insert a description of the electronic bid opening procedures; otherwise insert "Not Applicable".]		
ITB 25.3	The Letter of Bid and Bills of Quantities [insert "shall" or "shall not"] be initialed by representatives of the Employer attending Bid opening.		
	If initialization is required, it shall be conducted as follows: [If "shall" is		
	inserted above, insert a description of the manner in which the Letter of Bid and Bill of Quantities are to be initialed, e.g., pages (all or some) to be initialed and number of Employer representatives attending Bid opening that shall initial the Letter of Bid and Bill of Quantities. Otherwise insert "Not Applicable".]		
E. Evaluation and Comparison of Bids			
ITB 32.1 The currency(ies) of the Bid shall be converted into a single cu follows:			
[Insert a description of the procedure to be used]			
	The currency that shall be used for bid evaluation and comparison purposes to convert all bid prices expressed in various currencies into a single currency is:		
	name of currency]		
	The source of exchange rate shall be: [Insert name of the source of exchange rates (e.g., the Central Bank in the Employer's Country).]		
	The date for the exchange rate shall be:[Insert date]		
	[The date selected shall not be earlier than 28 days prior to the submission of bids and later than the original date for expiry of the period of bid validity.]		
ITB 33.1	[The following provision should be included and the required corresponding information inserted only if the Loan Agreement authorizes the application of domestic contractor price preference and the Employer intends to apply it to the subject contract. Otherwise omit]		
	A margin of preference[insert "shall"] apply.		
	If a margin of preference applies the application methodology shall be:		

	[If a margin of preference applies, insert a description of the methodology that will be applied. Otherwise insert "Not Applicable".]	
ITB 34.6	The combined price for the Rehabilitation and Improvement Works may not exceed the following threshold: [select one of the two options below] Option 1:% of the total contract price excluding provisional sums [insert percentage], or Option 2: The amount of[insert amount and currency]	

Section III. Evaluation and Qualification Criteria

(Following Prequalification)

This Section contains all the criteria that the Employer shall use to evaluate bids and qualify Bidders. In accordance with ITB 34 and ITB 36, no other factors, methods or criteria shall be used. The Bidder shall provide all the information requested in the forms included in Section IV, Bidding Forms.

-	-	
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2.

In ado	dition to the criteria listed in ITB 34.2 (a) – (e) the following criteria shall apply:		
1.1	Assessment of adequacy of Technical Proposal with Requirements		
1.2	Alternative Completion Times, if permitted under ITB 13.2, will be evaluated as follows:		
1.3	Technical alternatives , if permitted under ITB 13.4, will be evaluated as follows:		
Qua	lification		
2.1	Update of Information		
	The Bidder shall continue to meet the criteria used at the time of prequalification.		
2.2	Financial Resources		
	Using the relevant Forms CCC and FIN-1 in Section IV, Bidding Forms, the Bidder must demonstrate access to, or availability of, financial resources such as liquid assets, unencumbered real assets, lines of credit, and other financial means, other than any contractual advance payments to meet:		
	(i) the following cash-flow requirement:		

and

(ii) the overall cash flow requirements for this contract and its current Works commitment.

2.3 Personnel

The Bidder must demonstrate that it has the personnel for the key positions that meet the following requirements:

No.	Position	Total Work Similar Experience (years)	In Similar Works Experience (years)
1			
2			
3			
4			
5			

The Bidder shall provide details of the proposed personnel and their experience records in the relevant Information Forms included in Section IV, Bidding Forms.

2.4 Equipment

The Bidder must demonstrate that it has the key equipment listed hereafter:

No.	Equipment Type and Characteristics	Minimum Number required
1		
2		
3		
4		
5		

The Bidder shall provide further details of proposed items of equipment using the relevant Form in Section IV, Bidding Forms.

Section III. Evaluation and Qualification Criteria

(Without Prequalification)

This Section contains all the criteria that the Employer shall use to evaluate bids and qualify Bidders. In accordance with ITB 34 and ITB 36, no other factors, methods or criteria shall be used. The Bidder shall provide all the information requested in the forms included in Section IV, Bidding Forms.

1. Evaluation

1.1	Assessment of adequacy of Technical Proposal with Requirements
1.2	Alternative Completion Times , (if permitted under ITB 13.2, will be evaluated as follows:
1.3	Technical alternatives , if permitted under ITB 13.4, will be evaluated as follows:

In addition to the criteria listed in ITB 34.2 (a) – (e) the following criteria shall apply:

2. Qualification

Factor	2.1 ELIGIBILITY							
		Cr	iteria					
			Bidd	ler				
Sub-Factor	Requirement	Single Entity	Joint Vo	enture, Consor Association	tium or	Documentation Required		
			All partners combined	Each partner	At least one partner			
2.1.1 Nationality	Nationality in accordance with ITB 4.2.	Must meet requirement	Existing or intended JVCA must meet requirement	Must meet requirement	N/A	Form ELI –1.1 and 1.2, with attachments		
2.1.2 Conflict of Interest	No- conflicts of interests as described in ITB 4.3.	Must meet requirement	Existing or intended JVCA must meet requirement	Must meet requirement	N/A	Letter of Bid		
2.1.3 <i>Bank I neligibility</i>	Not having been declared ineligible by the Bank as described in ITB 4.4.	Must meet requirement	Existing JVCA must meet requirement	Must meet requirement	N/A	Letter of Bid		

Factor	2.1 ELIGIBILITY						
		Cr	iteria				
			Bidd	ler			
Sub-Factor	Requirement	Single Entity	Joint V	enture, Consor Association	tium or	Documentation Required	
			All partners combined	Each partner	At least one partner	1	
2.1.4 Government Owned Entity	Compliance with conditions of ITB 4.5	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Form ELI -1.1 and 1.2, with attachments	
2.1.5 Ineligibility based on a United Nations resolution or Borrower's country law	Not having been excluded as a result of the Borrower's country laws or official regulations, or by an act of compliance with UN Security Council resolution, in accordance with ITB 4.7	Must meet requirement	Existing JVCA must meet requirement	Must meet requirement	N/A	Letter of Bid	

	Factor	2.2 H I S T	ORICAL C	ONTRAC	г Non-Pei	RFORMAN	CE
			Cri	teria			
				Bie	dder		
Sı	ub-Factor	Requirement	G. I	Joint V	Venture, Conso Association	rtium or	Documentation Required
		acquironion.	Single Entity	All partners combined	Each partner	At least one partner	
2.2.1	History of non-performing contracts	Non-performance of a contract did not occur within the last (_) years prior to the deadline for application submission, based on all information on fully settled disputes or litigation. A fully settled dispute or litigation is one that has been resolved in accordance with the Dispute Resolution Mechanism under the respective contract, and where all appeal instances available to the bidder	Must meet requirement by itself or as partner to past or existing JVCA	N/A	Must meet requirement by itself or as partner to past or existing JVCA	N/A	Form CON - 2

Factor	2.2 H1ST	2.2 HISTORICAL CONTRACT NON-PERFORMANCE						
		Cri	teria					
			Bi	dder				
Sub-Factor	Requirement	G. I	Joint Venture, Consortium or Association			Documentation Required		
	requirement	Single Entity	All partners combined	Each partner	At least one partner			
	have been exhausted.							
2.2.2 Pending Litigation	All pending litigation shall in total not represent more than percent (%) of the Bidder's net worth and shall be treated as resolved against the Bidder.	Must meet requirement by itself or as partner to past or existing JVCA	N/A	Must meet requirement by itself or as partner to past or existing JVCA	N/A	Form CON – 2		

Factor	2.3 FINANCIAL SITUATION							
		Cri	teria					
			Bio	dder				
Sub-Factor	Requirement		Joint V	enture, Consor	rtium or	Documentation Required		
	requirement	Single Entity	All partners combined	Each partner	At least one partner			
2.3.1 Historical Financial Performance	Submission of audited balance sheets or if not required by the law of the bidder's country, other financial statements acceptable to the Employer, for the last [] years to demonstrate the current soundness of the bidders financial position and its prospective long term profitability. (a) (criterion 1) (b) (criterion 2) (c)	Must meet requirement	N/A	Must meet requirement	N/A	Form FIN – 3.1 with attachments		

Factor	2.3 FINANCIAL SITUATION						
		Cri	teria				
			Bio	dder			
Sub-Factor	Requirement Sin			enture, Consortium or Association		Documentation Required	
	2.004	Single Entity	All partners combined	Each partner	At least one partner		
2.3.2. Average Annual Turnover	Minimum average annual turnover of, calculated as total certified payments received for contracts in progress or completed, within the last() years	Must meet requirement	Must meet requirement	Must meet percent (%) of the requirement	Must meet percent (%) of the requirement	Form FIN –3.2	

Factor	2.3 FINANCIAL SITUATION							
		Cri	teria					
			Bio	dder				
Sub-Factor	Requirement	G. I	Joint V	enture, Consor	rtium or	Documentation Required		
	Requirement	Single Entity	All partners combined	Each partner	At least one partner			
2.3.3.Financial R esour ces	The Bidder must demonstrate access to, or availability of, financial resources such as liquid assets, unencumbered real assets, lines of credit, and other financial means, other than any contractual advance payments to meet: (i) the following cash-flow requirement: and (ii) the overall cash flow requirements for this contract and its current commitments.	Must meet requirement	Must meet requirement	Must meet percent (%) of the requirement	Must meet percent (%) of the requirement	Form FIN –3.3		

Factor	2.4 EXPERIENCE							
		Crite	eria					
			Bidde	r				
Sub-Factor	Requirement	G' . I. E . 4.4		nture, Cons Association		Documentation Required		
		Single Entity	All partners combined	Each partner	At least one partner			
2.4.1General Experience	Experience under contracts in the role of contractor, subcontractor, or management contractor for at least the last [] years prior to the applications submission deadline, and with activity in at least nine (9) months in each year.	Must meet requirement	N/A	Must meet requirem ent	N/A	Form EXP-4.1		
2.4.2Specific Experience	(a)Participation as contractor, management contractor, or subcontractor, in at least() contracts within the last() years, each with a value of	Must meet requirement	Must meet requirements for all characteristic s	N/A	Must meet requirement for one characteristic	Form EXP 2.4.2(a)		

Factor	2.4 EXPERIENCE						
		Crite	ria				
			Bidder	•			
Sub-Factor	Requirement			nture, Cons Association		Documentation Required	
		Single Entity	All partners combined	Each partner	At least one partner	-	
	at least						

Factor	2.4 EXPERIENCE						
		Crite	ria				
			Bidde				
Sub-Factor	Requirement	Circula Essaia	Joint Venture, Consortium or Association			Documentation Required	
		Single Entity	All partners combined	Each partner	At least one partner		
2.4.2 Specific Experience	b) For the above or other contracts executed during the period stipulated in 2.4.2(a) above, a minimum experience in the following key activities:	Must meet requirements	Must meet requirements	N/A	Must meet requirements	Form EXP- 2.4.2(b)	

2.5 Personnel

The Bidder must demonstrate that it has the personnel for the key positions that meet the following requirements:

No.	Position	Total Work Similar Experience (years)	In Similar Works Experience (years)
1			
2			
3			
4			
5			

The Bidder shall provide details of the proposed personnel and their experience records using Forms PER-1 and PER-2 included in Section IV, Bidding Forms.

2.6 Equipment

The Bidder must demonstrate that it has the key equipment listed hereafter:

No.	Equipment Type and Characteristics	Minimum Number required
1		
2		
3		
4		
5		

The Bidder shall provide further details of proposed items of equipment using Form EQU in Section IV, Bidding Forms.

Section IV. Bidding Forms

Table of Forms

Letter of Bid	54
Appendix to Bid	57
Bills of Quantities	60
Bill of Quantities for Maintenance Services	61
Bill of Quantities for Rehabilitation and Improvement Works	64
Bills of Quantities for Emergency Works	68
Technical Proposal	72
Current Commitments / Financial Resources	80
Form of Bid Security	82

Letter of Bid

To:	ICB No.:	No.:		
We,	, the undersigned, declare that:			
(a)	We have examined and have no reservations to the Bidding Docur Addenda issued in accordance with Instructions to Bidders (ITB) 8	_		
(b)	We offer to execute in conformity with the Bidding Document the following Works:			
(c)	Our bid price, excluding any discounts offered in item (d) below, is composed of the following components:			
	Description	Amount (in numbers)		
	(a) Maintenance Services in an amount of [amount in words] [name of currency].	numbers)		
	(b) Rehabilitation Works in an amount of [amount in words] [name of currency].			
	(c) Improvement Works in an amount of [amount in words] [name of currency].			
	A. $SUB-TOTAL = (a) + (b) + (c)$			
	(d) Emergency Works in an amount of [amount in words] [name of currency].			
	B. TOTAL = A + (d)			
(d)	We hereby confirm that our combined price for Rehabilitation We Works does not exceed the threshold given in the BDS (34.6), we or percentage of the total contract price]. The discounts offered and the methodology for their application is:	which is [insert amount		
		•		

(-)	Our bid shall be valid for a the bid submission deadlin- remain binding upon us and period;	e in accordance with	the Bidding Docume	ent, and it shall
(f)	If our bid is accepted, we commit to obtain a performance security in accordance with Bidding Document;			accordance with
(g)	We, including any subcontractors or suppliers for any part of the contract, have or wi have nationalities from eligible countries, in accordance with ITB-4.2;			act, have or will
(h)	We, including any subcontractors or suppliers for any part of the contract, do not have any conflict of interest in accordance with ITB-4.3;			
(i)	We are not participating, as a Bidder or as a subcontractor, in more than one bid in thi bidding process in accordance with ITB-4.3, other than alternative offers submitted in accordance with ITB-13;			
(j)	We, including any of our subcontractors or suppliers for any part of the contract, have not been declared ineligible by the Bank, under the Employer's country laws or official regulations or by an act of compliance with a decision of the United Nations Security Council;			
(k)	We are not a government owned entity/We are a government owned entity but meet the requirements of ITB-4.5; ⁶			tity but meet the
(1)	We have paid, or will pay the following commissions, gratuities, or fees with respect to the bidding process or execution of the Contract:			
	Name of Recipient	Address	Reason	Amount
				

contract is prepared and executed; and

⁶ Bidder to use as appropriate

(n)	We understand that you are not bound to accept the lowest evaluated bid or any other bid
	that you may receive.

(o)	We hereby certify that we have taken steps to ensure that no person acting for us or or
	our behalf will engage in bribery.

Name	In the capacity of
Signed	
Duly authorized to sign the bid for and on behavior	alf of
Dated on	day of,

Appendix to Bid

Schedule of Adjustment Data

[In Tables A, B, and C, below, the Bidder shall (a) indicate its amount of local currency payment, (b) indicate its proposed source and base values of indices for the different foreign currency elements of cost, (c) derive its proposed weightings for local and foreign currency payment, and (d) list the exchange rates used in the currency conversion. In the case of very large and/or complex contracts, it may be necessary to specify several families of price adjustment formulae corresponding to the different works involved.]

Table A. Local Currency

Index code*	Index description*	Source of index*	Base value and date*	Bidder's related currency amount	Bidder's proposed weighting
	Nonadjustable	_	_	_	A:*
					B:
					C:
					D:
					E:
			Total		1.00

[* To be entered by the Employer]

Table B. Foreign Currency

State type: [If the Bidder wishes to quote in more than one foreign currency, this table should be repeated for each foreign currency.]

Index code	Index description	Source of index	Base value and date	Bidder's related source currency in type/amount	Equivalent in FC1	Bidder's proposed weighting
	Nonadjustable	_	_	_		A:* B: C: D:
				Total		1.00

^{[*} To be entered by the Employer]

Table C. Summary of Payment Currencies

For[insert nam	ne of Section of the Works]
----------------	-----------------------------

[Separate tables may be required if the various sections of the Works (or of the Bill of Quantities) will have substantially different foreign and local currency requirements. The Employer should insert the names of each Section of the Works.]

Name of payment currency	A Amount of currency	B Rate of exchange (local currency per unit of foreign)	C Local currency equivalent C = A x B	D Percentage of Net Bid Price (NBP) <u>100xC</u> NBP
Local currency		1.00		
Foreign currency #1				
Foreign currency #2				
Foreign currency #				
Net Bid Price				100.00
Provisional sums expressed in local currency	[To be entered by the Employer]		[To be entered by the Employer]	
BID PRICE				

Bills of Quantities

The bid includes the following Bills of Quantities:

- Bill of Quantities for Maintenance Services
- Bill of Quantities for Rehabilitation Works (if those are required under the contract)
- Bill of Quantities for Improvement Works (if those are required under the contract)
- Bill of Quantities for Emergency Works

[Samples of the above Bills of Quantities are presented on the following pages.]

Bill of Quantities for Maintenance Services

- 1. The Bill of Quantities for Maintenance Services shall be read in conjunction with the Instructions to Bidders, Conditions of Contract, Specifications and the Drawings.
- 2. This Bill of Quantities is the basis for payment of maintenance services that are to be provided on a lump sum per km basis for maintaining the roads covered under the contract, at the Service Levels defined in the Specifications. The rates given by the bidder shall, except insofar as is otherwise provided under the Contract, include all plant, equipment, labour, management and supervision, materials, erection, maintenance, insurance, profit, taxes and duties, together with all general risks, liabilities and obligations set out or implied in the Contract.
- 3. Payment shall be made in accordance with the actual performance of the Contractor and compliance with the Service Level criteria given in the Specifications for each road. Failure to meet the Service Levels will result in payment reductions in accordance with Clause 47 of the General Conditions and the Performance Specifications.
- 4. The unit rates and prices shall be quoted entirely in local currency but payment will be made in the proportions and currencies quoted in the Schedule of Adjustment Data.
- 5. A unit rate or price shall be entered by the bidder against each item in the Bill of Quantities. The cost of items against which the bidder has failed to enter a unit rate or price shall be deemed to be covered by other unit rates and prices entered in the Bill of Quantities.
- 6. General directions and descriptions of work and materials are not repeated or summarised in the Bill of Quantities. References to the relevant sections of the Contract documentation shall be made before entering rates or prices against each item in the Bill of Quantities.
- 7. The method of measurement of completed work for payment shall be in accordance with the measurement and payment provisions of the relevant section in the Performance Specifications.
- 8. Arithmetical errors discovered prior to award of the Contract will be corrected by the Employer pursuant to the Instructions to Bidders.

Bill of Quantities and Unit Prices for Maintenance Services

[To be completed by the bidder]

Price N°	Description of Service and Price	Unit Price
		In Local Currency
1.	Unit Price per kilometer and month	
	This price is the full remuneration to the Contractor to carry out the services and works required in order to reach and maintain the service levels described in the Specifications and elsewhere in the contract. It further includes the activities of the Contractor related to self-control, quality assurance and material testing. The Unit Price per kilometer and month is: Road section a:	
	Road section b:Road section c:	
	■ Etc	
	[Note: There may either be one unit price for all roads or road sections included in the contract, or different prices for different roads.]	

Bill of Quantities for Maintenance Services and their Prices

				Unit Price per kilometer and month	Total Price
Price N°	Road or road section	Length	Service		
		(km)	Level		
2	Monthly lump-sum payment				
2a	[Indicate Roads or Road Sections]	km	[indicate Service		
2b			Level for each		
2c			road or		
			road section]		
				SUB-TOTAL per month :	
		Multiply b		onth (duration of contract) al for contract period	[Number of months]

Bill of Quantities for Rehabilitation and Improvement Works

1. The Bills of Quantities for Rehabilitation Works and for Improvement Works shall be read in conjunction with the Instructions to Bidders, Conditions of Contract, Specifications and the Drawings.

Bill of Quantities for Rehabilitation Works

- 2. The Bill of Quantities for Rehabilitation Works presents a number of explicit activities considered necessary to rehabilitate particular road sections before some or all of the Service Level criteria for performance-based maintenance defined in the Specifications can be applied. The bidder shall undertake a detailed assessment of road conditions at the time of bid. The location and extent of the particular rehabilitation works considered necessary to reach required Service Levels shall be indicated by the bidder in his bid submission.
- 3. Although the bidding document may show estimated quantities of Rehabilitation Works, it is the responsibility of the bidder to prepare his own estimate for the quantity of work required for each rehabilitation activity, and he shall indicate these quantites in the Bill of Quantities.
- 4. The Employer may in some cases indicate fixed quantities for some specific Rehabilitation Works, such as asphalt resurfacing. Those cases are clearly indicated as such by the Employer in the Bid Data Sheet, the Specifications and the Bill of Quantities for Rehabilitation Works.
- 5. Payment for Rehabilitation Works shall be made in relation to the work outputs satisfactorily completed in conformity with the Specifications as measured by the Contractor and verified by the Project Manager, and valued at the unit rates and prices stated in the priced Bill of Quantities. The total price for Rehabilitation Works and Improvement Works, if any, shall not exceed the threshold value or percentage given by he Employer in the Bid Data Sheet.

Bill of Quantities for Improvement Works

- 6. The Bill of Quantities for Improvement Works lists a set of interventions to be carried out by the contractor that add new characteristics to the Road in response to existing or new traffic, safety or other conditions, as defined in the Bid Data Sheet and the Specifications.
- 7. Payment for Improvement Works shall be made in relation to the work items satisfactorily completed in conformity with the Specifications, as measured by the Contractor and verified by the Project Manager, and valued at the unit rates and prices stated in the priced Bill of Quantities for Improvement Works.

General

- 8. The unit rates and prices bid in the priced Bill of Quantities shall, except insofar as is otherwise provided under the Contract, include all plant, equipment, labor, supervision, materials, erection, maintenance, insurance, profit, taxes and duties, together with all general risks, liabilities and obligations set out or implied in the Contract. Unit rates and prices shall also include the cost of engineering design services, and measures needed to prevent or mitigate environmental impacts and safety measures.
- 9. The unit rates and prices shall be quoted entirely in local currency but payment will be made in the proportions and currencies quoted in the Schedule of Adjustements.
- 10. A quantity, unit rate or price shall only be entered against those work items considered necessary to attain the required Service Levels and sustain such Service Levels thereafter through execution of maintenance services that are provided for separately.
- 11. General directions and descriptions of work and materials are not repeated or summarised in the Bill of Quantities. References to the relevant sections of the Contract documentation shall be made before entering rates or prices against each item in the Bill of Quantities.
- 12. The method of measurement of completed work for payment shall be in accordance with the measurement and payment provisions of the relevant section of the Specifications.
- 13. Arithmetical errors discovered prior to award of the Contract will be corrected by the Employer pursuant to the Instructions to Bidders.

Bill of Quantities for Rehabilitation Works					
Activity	Quantity	Unit	Unit Price	Write in Full	Total Price
Milling and					
Replacement					
Lane		Km			
Shoulder		Km			
Retrofiling					
Lane		Km			
Shoulder		Km			
Asphalt Slurry					
Lane		Km			
Shoulder		Km			
Etc					
	•		Total Price for Reh	abilitation Works	

Quantity	Unit	Improvement W Unit Price	Write in Full	Total Price
30	Km			
30	Km			
5	Bus Stop type A			
	Total	Price for Impro	vement Works	
	30	30 Km 5 Bus Stop type A	30 Km 5 Bus Stop type A	30 Km 30 Km 5 Bus Stop

Bills of Quantities for Emergency Works

GENERAL

- 1. The Bill of Quantities for Emergency Works shall be read in conjunction with the Instructions to Bidders, Conditions of Contract, Specifications and the Drawings.
- 2. The quantities given in the Bill of Quantities are hypothetical and provisional, and are given to provide a common basis for bidding. Actual quantities for Emergency Works will be specified in Work Orders, issued by the Project Manager in accordance with the General Conditions. The basis of payment for Emergency Works will be the actual quantities of work ordered and carried out, as measured by the Contractor and verified by the Project Manager and valued at the unit rates and prices bid in the priced Bill of Quantities, where applicable, and otherwise at such unit rates and prices as may be agreed or determined by the Project Manager under the provisions of the Contract.
- 3. The unit rates and prices bid in the priced Bill of Quantities shall, except insofar as is otherwise provided under the Contract, include all plant, equipment, labour, supervision, materials, erection, maintenance, insurance, profit, taxes and duties, together with all general risks, liabilities and obligations set out or implied in the Contract.
- 4. The unit rates and prices shall be quoted entirely in local currency, but payment will be made in the proportions and currencies quoted in the Schedule of Adjustments.
- 5. A unit rate or price shall be entered against each item in the Bill of Quantities. The cost of items against which the Contractor has failed to enter a unit rate or price shall be deemed to be covered by other unit rates and prices entered in the Bill of Quantities.
- 6. General directions and descriptions of work and materials are not repeated or summarised in the Bill of Quantities. References to the relevant sections of the Contract documentation shall be made before entering rates or prices against each item in the Bill of Quantities.
- 7. The method of measurement of completed work for payment shall be in accordance with the measurement and payment provisions of the relevant section of the Specifications.
- 8. Arithmetical errors discovered prior to award of the Contract will be corrected by the Employer pursuant to Clause 29 of the Instructions to Bidders.

Bill of Quantities for Emergency Works

B. Work Items

1. The Bill of Quantities usually contains the following part Bills, which have been grouped according to the nature or timing of the work:

Bill No. 1—General Items

Bill No. 2—Earthworks

Bill No. 3—Culverts and Bridges

Bill No. 4—etc., as required

and

Summary Bill of Quantities

2. Bidders shall price the Bill of Quantities in local currency only and shall indicate in the Schedule of Adjustments the percentage expected for payment in foreign currency or currencies.

Bill of Quantities for Emergency Works

Bill No. 1: General Items

Item no.	Description	Unit	Quantity	Rate	Amount
101	Provide diversion road with gravel surfacing	km	5		
102	Provide for traffic control and maintenance of diversion road	Km/day	30		
103	Transport of material for fill or improved subgrade layers	m ³ x km	2500		
104	Transport of material for gravel wearing course	m ³ x km	1400		
105	etc				
	(car	rried forwar	Total for Bild to Summa		

Bill of Quantities for Emergency Works

Bill No. 2: Earthworks

Item no.	Description	Unit	Quantity	Rate	Amount	
201	Excavate topsoil to maximum depth 25 cm and stockpile for reuse, maximum haul distance 1 km	m ³	95,000			
202	Excavate topsoil to maximum depth 25–50 cm, and dispose	m ³	15,000			
203	—etc.—					
206	Excavate fill material from cuttings or approved borrow pits, haul up to 1 km, deposit, shape, and compact to fill	m ³	258,000			
207	Excavate rock in cuttings and dispose, any depth	m ³	25,000			
208	—etc.—					
	Total for Bill No. 2					
(carried forward to Summary, p)						

Technical Proposal

The bidder's Technical Proposal shall include the following elements:

SCHEDULE A. Projected Cash Flow

SCHEDULE B. Site Organizations

SCHEDULE C. Subcontractors

SCHEDULE D. Contractor's Equipment

SCHEDULE E. Initial Tentative Program of Performance

SCHEDULE F. Key Personnel Proposed

Instructions on how to present the various schedules of the Technical Proposal are given on the following pages.

SCHEDULE A

Projected Cash Flow

- (1) Bidders shall tabulate below estimates, based on their preliminary work programme, of:
 - (a) On the expenditure side, the value of the work which will be carried out;
 - (b) On the revenue side, the net payments to which they will become entitled with due allowance for the advance payment and repayment, materials prepayments, and retention money, but excluding price adjustments for rise and fall and provisional sums for emergency works.
 - (c) The projected net cash flow during the contract period.
- (2) The prospective successful bidder may be required to submit full details to substantiate his estimates.

Period (Months)	Cost/Value of Rehabilitation and Improvement Works [indicate amount and currency]	Cost/Value of Maintenance Services [indicate amount and currency]	Net Payments to be received [indicate amount and currency]	Net Cash Flow
Start Date				
1 to 6				
6 to 12				
12 to 18				
18 to 24				
24 to 30				
30 to 36				
36 to 42				
42 to 48				
48 to 54				
54 to 60				
etc.				
Total				

SCHEDULE B

Site Organization

Bidders shall give below full particulars of the organisation they propose to establish, direct, and administer the performance of the Contract. In particular, bidders shall indicate the location of site camps and the resources they intend to allocate to Self Control Units for planning and monitoring purposes.

- 1. SITE ORGANIZATION CHART
- 2. NARRATIVE DESCRIPTION OF SITE ORGANISATION CHART

SCHEDULE C

SUBCONTRACTORS / PARTNERS

Bidders shall list below those parts of the Works and Services which they propose to subcontract, and state the approximate value of those parts and the names and addresses of the proposed subcontractors, if those are known at bidding stage. Bidders shall also list other business partners involved in the execution of the contract and their respective roles and responsibilities.

Part of Works / Services: Approximate value: Name and address of proposed subcontractor / partner:

Part of Works / Services: Approximate value: Name and address of proposed subcontractor / partner:

Part of Works / Services: Approximate value: Name and address of proposed subcontractor / partner:

Part of Works / Services: Approximate value: Name and address of proposed subcontractor / partner:

SCHEDULE D

Contractor's Equipment

Form EQU

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III, Evaluation and Qualification Criteria. A separate Form shall be prepared for each item of equipment listed (with a current new purchase price exceeding US\$ 5.000), or for alternative equipment proposed by the Bidder.

Item of equipr	nent			
Equipment information	Name of manufacturer	Model and power rating		
	Capacity	Year of manufacture		
Current status	Current location			
_	Details of current commitments			
Source	Indicate source of the equipment ☐ Owned ☐ Rented ☐ Leased	☐ Specially manufactured		
Omit the follow	wing information for equipment owned by	the Bidder.		
Owner	Name of owner			
	Address of owner			
	Telephone	Contact name and title		
	Fax	Telex		
Agreements	Details of rental / lease / manufacture agr	reements specific to the project		

SCHEDULE E

Initial Tentative Program of Performance

To demonstrate a clear understanding of the requirements of the Contract, bidders shall provide the following:

- i) a bar chart sub-divided into sections for each road showing the major activities to be carried out for Maintenance Services, Rehabilitation Works and Improvement Works, if any. The activities shall be shown against time, with linkages shown between related/sequential activities as far as possible and appropriate.
- ii) a bar chart or schedule showing the usage of major plant, including those listed in Schedule D (Contractor's Equipment).

SCHEDULE F

Key Personnel proposed

Form PER -1

Key Personnel proposed by Bidder

Road Manager (Name):
Road Maintenance Engineer (Name):
Surveyor (Name):
Others (Names, if any):

The CV's (or resumes) for each of the proposed key personnel are presented in Forms PER $-\,2$ below.

Form PER-2

Resume of Proposed Personnel

ler	
Name	Date of birth
Professional qualifications	•
Name of employer	
Address of employer	
Telephone	Contact (manager / personnel officer)
Fax	E-mail
Job title	Years with present employer
	Professional qualifications Name of employer Address of employer Telephone Fax

Summarize professional experience over the last 20 years, in reverse chronological order. Indicate particular technical and managerial experience relevant to the project.

From	То	Company / Project / Position / Relevant technical and management experience

Current Commitments / Financial Resources

Form CCC

Current Contract Commitments / Works in Progress

Bidders and each partner to a JVA should provide information on their current commitments on all contracts that have been awarded, or for which a letter of intent or acceptance has been received, or for contracts approaching completion, but for which an unqualified, full completion certificate has yet to be issued.

Name of contract	Employer,	Value of	Estimated	Average monthly
	contact	outstanding work	completion date	invoicing over
	address/tel/fax	(current US\$		last six months
		equivalent)		(US\$/month)
1.				
2.				
3.				
4.				
5.				
etc.				

Form FIN-1

Financial Resources

Specify proposed sources of financing, such as liquid assets, unencumbered real assets, lines of credit, and other financial means, net of current commitments, available to meet the total construction cash flow demands of the subject contract or contracts as indicated in Section III, Evaluation and Qualification Criteria

Source of financing	Amount (US\$ equivalent)
1.	
2.	
3.	
4.	

product.

Form of Bid Security

(Bank Guarantee)

[Bank's Name, and Address of Issuing Branch or Office]
Beneficiary: [Name and Address of Employer]
Date:
BID GUARANTEE No.:
We have been informed that [name of the Bidder] (hereinafter called "the Bidder") has submitted to you its bid dated (hereinafter called "the Bid") for the execution of [name of contract] under Invitation for Bids No ("the IFB").
Furthermore, we understand that, according to your conditions, bids must be supported by a bid guarantee.
At the request of the Bidder, we [name of Bank] hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of [amount in figures] () [amount in words] upon receipt by us of your first demand in writing accompanied by a written statement stating that the Bidder is in breach of its obligation(s) under the bid conditions, because the Bidder:
 (a) has withdrawn its Bid during the period of bid validity specified by the Bidder in the Form of Bid; or (b) having been notified of the acceptance of its Bid by the Employer during the period of bid validity, (i) fails or refuses to execute the Contract Agreement or (ii) fails or refuses to furnish the performance security, in accordance with the ITB.
This guarantee will expire: (a) if the Bidder is the successful Bidder, upon our receipt of copies of the contract signed by the Bidder and the performance security issued to you upon the instruction of the Bidder; and (b) if the Bidder is not the successful Bidder, upon the earlier of (i) our receipt of a copy your notification to the Bidder of the name of the successful Bidder; or (ii) twenty-eight days after the expiration of the Bidder's bid.
Consequently, any demand for payment under this guarantee must be received by us at the office on or before that date.
This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 458.
[signature(s)]

Note: All italicized text is for use in preparing this form and shall be deleted from the final

Section V. Eligible Countries

Eligibility for the Provision of Goods, Works and Services in Bank-Financed Procurement

- 1. In accordance with Para 1.8 of the Guidelines: Procurement under IBRD Loans and IDA Credits, dated May 2004, the Bank permits firms and individuals from all countries to offer goods, works and services for Bank-financed projects. As an exception, firms of a Country or goods manufactured in a Country may be excluded if:
 - Para 1.8 (a) (i): as a matter of law or official regulation, the Borrower's Country prohibits commercial relations with that Country, provided that the Bank is satisfied that such exclusion does not preclude effective competition for the supply of the Goods or Works required, or
 - Para 1.8 (a) (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 prohibits any import of goods from that Country or any payments to persons or entities in that Country.
- 2. For the information of borrowers and bidders, at the present time firms, goods and services from the following countries are excluded from this bidding:

With reference to paragraph	— 1.8 (a) (ii) of the Guide

PART 2 - SPECIFICATIONS

Section VI. Specifications

Notes for preparing Specifications for Output- and Performance-based Road Contracts

Precise and clear Specifications are a prerequisite for bidders to respond realistically and competitively to the requirements of the Employer without qualifying or conditioning their bids. In the context of bidding documents for the Output- and Performance-based Road Contracts, the Specifications must cover different areas (performance criteria, general technical aspects, organization, environmental regulations, etc.) and must be drafted to permit the widest possible competition and, at the same time, present a clear statement of the required standards to be complied with. Specifications must be written specially by the Employer to suit the specific conditions of each country and of the roads included in the contract. Recognizing that there can not be mandatory standard specifications for universal application in all countries, this document does not include any sample texts for specifications. However, for the guidance and convenience of its clients and other users of this document, the Bank has prepared as an Annex to this document a separate volume titled "Sample Specifications for OPRC" which provides sample texts and technical guidance for the preparation of Section VI - Specifications. These can be applied, with the necessary adjustments, for different types of roads ranging from low-volume unpaved rural roads to multi-lane paved highways.. The Bank suggests the use of these sample texts as appropriate; these nevertheless still need adaptation to the specific conditions of the road networks under contract. The sample Specifications provided reflect the basic principles which have been adopted under this sample bidding document for Output- and Performance-Based Road Contracts. They should also help to prevent conflicts which could derive from contradictions between the administrative sections of the bidding document and the Specifications.

The document "Sample Specifications for OPRC" can be found at the World Bank's Procurement website.

Section VI of the bidding document should include as a minimum the following parts:

Part A: Performance Specifications

This part should include a detailed description of (i) the concepts on which the Output- and Performance-Based Road Contracts are based; (ii) the Service Levels required on the roads included in the contract; (iii) the methods and procedures to be applied for measuring compliance with Service Levels; (iv) the payment reductions or liquidated damages applied in case of non-compliance, (v) the Rehabilitation Works and the Improvement Works the contractor will have to carry out in addition to the Services of Management and Maintenance, and (vi) other aspects, such as the internal organization of the contractor, etc.

Part B: General Specifications for Roadworks

This part is very country-specific and should present the norms and specifications generally applied for roadworks in a specific country, mainly in terms of quality and workmanship. Part

B is applicable mainly for specific Rehabilitation and Improvement Works described in Part A, but some parts of it may also be applicable for Maintenance Services and Emergency Works.

Part C: Specifications for Emergency Works

This part must describe the procedures and other rules to be applied if Emergency Works are to be carried out within the contract. Use of the sample text would help to ensure that the concept of Emergency Works is not misused.

Part D: Environmental and Social Specifications

This part would provide a set of rules to be followed by the contractor in order to avoid unnecessary damage to the environment and to cover social aspects on housing, sanitation and health of labor.

Other Specifications may be needed concerning the use of materials, plant and equipment by the contractor, if the provisions included in the General Conditions (GC, Section IV) and complemented in the Particular Conditions (PC, Section V) are deemed insufficient by the Employer. However, these issues may already be covered in the General Specifications for Roadworks.

Only if the various parts of the Specifications are completed adequately and included in the bidding document, will the objectives of economy, efficiency, and equality in procurement be realized, responsiveness of bids be ensured, and the subsequent task of bid evaluation facilitated.

The use of metric units is encouraged by IBRD.

Care must be taken in drafting Specifications to ensure that they are not too restrictive. In the specification of standards for materials, plant, other supplies, and workmanship, recognized international standards should be used as much as possible.

These **Notes for Preparing Specifications** are intended only as information for the Employer or the person drafting the bidding documents. They should **not** be included in the final bidding documents.

PART 3 – CONDITIONS OF CONTRACT AND CONTRACT FORMS

Section VII. General Conditions (GC)

Table of Clauses

A. Contract and Interpretation	93
1. Definitions.	
2. Interpretation	
3. Documents Forming the Contract	
4. Language and Law	
5. Notices	
6. Settlement of Disputes (Alternative when using a Dispute Review Board)	
6. Settlement of Disputes (Alternative when using a Dispute Review Expert).	
B. Assignment of Responsibilities	103
7. Scope of Works and Services	103
8. Design Responsibility	104
9. Copyright	106
10. Start Date and Completion	
11. Contractor's Responsibilities	107
12. Subcontracting	108
13. Assignment of Contract	108
14. Employer's Responsibilities	109
15. Confidential Information	
C. Execution of Works and Services	110
16. Representatives	110
17. Work Program	113
18. Execution of Works	114
19. Staff and Labor	116
20. Test and Inspection	119
21. Rehabilitation Works	120
22. Improvement Works	121
23. Maintenance Services	121
24. Performance Standards	121
25. Contractor's Self-Control of Quality and Safety	121
26. Environmental and Safety Requirements	122
27. Work Orders for Improvement Works and Emergency Works	
28. Taking Over Procedures	123
29. Emergency Works	123
30. Quality of materials used by Contractor	124
31 Signalling and demarcation of work zones and bypasses	125

D. Allocation of Risks	125
32. Employer's Risks	125
33. Contractor's Risks	126
34. Loss of or Damage to Property; Accident or Injury to Workers;	
Indemnification	126
35. Insurance	127
36. Unforeseen Conditions	129
37. Change in Laws and Regulations	130
38. Force Majeure	
E. Guarantees and Liabilities	132
39. Completion Time Guarantee and Liability	132
40. Performance Guarantee and Liability	133
41. Defect Liability	133
42. Limitation of Liability	135
43. Liability for Damages through Traffic Accidents and Traffic Interruptions.	135
F. Payment	136
44. Contract Price	136
45. Advance Payment	136
46. Bill of Quantities	137
47. Measurement	138
48. Price Adjustments	138
49. Monthly Statements and Payments	139
50. Payments	
51. Retention and Reductions	
52. Taxes and Duties	141
53. Securities	141
54. Certificate of Completion	142
55. Final Statement	142
56. Discharge	143
57. As Built Drawings and Manuals	
G. Remedies	143
58. Suspension	
59. Termination	144
H. Provisional Sum	151
60. Provisional Sum	151
61. Use of Provisional Sum for Emergency Works	151
62. Use of Provisional Sum for Contingencies	
I. Change in Contract Elements	152
63. Change in Assignments to Contractor	
64. Extension Time for Completion	
65. Release from Performance	

A. CONTRACT AND INTERPRETATION

1. Definitions

1.1 Boldface type is used to identify defined terms.

Bill of Quantities means the priced and completed Bill of Quantities forming part of the Contractor's Bid.

The **Certificate of Completion** is a document issued by the Project Manager upon completion of Rehabilitation Works, Improvement Works and Emergency Works, or parts thereof, as applicable, in accordance with GC 54.1

The **Completion Date** is the date of completion of the Services and Works as certified by the Project Manager, in accordance with Sub-Clause 10.2.

The **Contract** is the Contract between the Employer and the Contractor to perform the services to be provided by the Contractor, and to execute, complete, and maintain the Works. It consists of the documents listed in Clause 3 below.

The **Contractor** is a person or corporate body whose Bid to carry out the Works and Services has been accepted by the Employer.

The **Contractor's Bid** is the completed bidding document submitted by the Contractor to the Employer.

The **Contract Price** is the price stated in the Letter of Acceptance and thereafter as adjusted in accordance with the provisions of the Contract.

Days are calendar days; **months** are calendar months.

A **Defect** is any part of the Works and Services not completed in accordance with the Contract.

The **Defects Liability Certificate** is the certificate issued by Project Manager upon correction of defects by the Contractor.

The **Defects Liability Period** is the period specified in the Contract and is applicable for Rehabilitation Works and Improvement Works, with exclusions identified in the PC, if any..

Dispute Review Board (DRB) is a board of three members selected and act in accordance with rules and procedures defined in the Contract to seek to resolve any dispute of any kind that may arise between the Employer and the Contractor in connection with or arising out of the Contract, as provided for in Clause 6 hereunder.

Dispute Review Expert (DRE) is one expert selected and acting in accordance with rules and procedures defined in the Contract to seek to resolve any dispute of any kind that may arise between the Employer and the Contractor in connection with or arising out of the contract, as provided for in Clause 6 hereunder.

Drawings include calculations and other information provided by the Contractor for the execution of the Contract.

Emergency Works is a set of necessary and sufficient activities to reinstate the Road and reconstruct its structure or right of way strip damaged as a result of natural phenomena with imponderable consequences, such as strong storms, flooding and earthquakes. The need for execution of Emergency Works is jointly identified by the Employer and the Contractor and for starting of execution of Emergency Works the Employer shall issue a Work Order.

The **Employer** is the party who employs the Contractor to carry out the Works and Services.

Equipment is the Contractor's machinery and vehicles brought temporarily to the Site to construct the Works and to carry out the Services.

Improvement Works consists of a set of interventions that add new characteristics to the Road in response to existing or new traffic, safety or other conditions, as defined in the Specifications.

Rehabilitation Works are specific and clearly defined civil works the Contractor is required to carry out under the conditions of the Contract, as defined in the Specifications. Rehabilitation Works quantities were estimated by the Contractor to achieve the performance standards defined by the Service Levels and offered at a Lump-Sum price.

The **Intended Completion Date** is the date on which it is intended that the Contractor shall complete the Works and Services. The Intended Completion Date is specified in the Particular Conditions (PC). The Intended Completion Date may be revised only by the Project Manager by issuing an extension of time.

Materials are all supplies, including consumables, used by the Contractor for incorporation in the Works and for provision of Services.

The **Project Manager** is the person named in the PC who is responsible for the overall administration of the Contract on behalf of the Employer, and the supervision of works and services to be

performed thereunder. The Project Manager may delegate through a written instrument some of his functions to any other competent person, retaining however the overall responsibility for the actions of that person. The Project Manager may not delegate the overall administrative control of the Contract.

Road means the road or network of roads for which the Works and Services are contracted under the Contract.

The **Road Management Office** is the location indicated by the Contractor from which the Road Manager operates, and where the Contractor shall receive notifications.

The **Road Manager** is a person appointed by the Contractor who is in charge of managing all activities of the Contractor under the Contract. He is also the Contractor's Representative for the purposes of this contract.

Services means all interventions on the Road under the Contract and all activities related to the management and evaluation of the Road which shall be carried out by the Contractor in order to achieve and keep the Road Performance Standards as defined by the Service Levels, and to receive full payment of the monthly fee under the contract

Service Levels are the minimum performance standards for the level of quality of conditions of the Road defined in the Specifications which the Contractor shall comply with.

The **Site** is the area defined as such in the PC.

Site Investigation Reports are those that were included in the bidding documents and are factual and interpretative reports about the surface and subsurface conditions at the Site.

The **Start Date** is the date when the Contractor has started the physical execution of the Works and Services on the site. It does not necessarily coincide with any of the Site Possession Dates.

A **Subcontractor** is a person or corporate body who has a contractual agreement with the Contractor to carry out certain activities related to the services to be provided under the contract, which may include work on the Site.

Specifications means the Specifications of the Works and Services included in the Contract and any modification or addition made or approved by the Project Manager.

A **Variation** is an instruction given by the Project Manager which varies the Works or Services.

The **Works** are what the Contract requires the Contractor to construct, install, and turn over to the Employer, as covered under Rehabilitation Works, Improvement Works and Emergency Works.

Work Order is an order issued by the Project Manager to the Contractor authorizing the execution of Improvement Works and Emergency Works, as provided for in Clause 27 hereunder.

2. Interpretation

2.1 In interpreting these General Conditions (GC), singular also means plural, male also means female or neuter, and vice versa. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Project Manager will provide instructions clarifying queries about these General Conditions (GC).

3. Documents Forming the Contract

- 3.1 The documents forming the Contract shall be interpreted in the following order of priority:
 - (1) Agreement,
 - (2) Letter of Acceptance,
 - (3) Contractor's Bid,
 - (4) Particular Conditions (PC),
 - (5) General Conditions (GC),
 - (6) Specifications,
 - (7) Drawings,
 - (8) Bill of Quantities, and
 - (9) any other document listed in the PC as forming part of the Contract.

4. Language and Law

4.1 The language of the Contract and the law governing the Contract are stated in the PC.

5. Notices

- 5.1 Unless otherwise stated in the Contract, all notices to be given under the Contract shall be in writing, and shall be sent by personal delivery, airmail post, special courier, fax or E-mail to the address of the relevant party set out in the PC, with the following provisions:
 - 5.1.1 Any notice sent by fax or E-mail shall be confirmed within two (2) days after dispatch by notice sent by airmail post or special courier, except as otherwise specified in the Contract.
 - 5.1.2 Any notice sent by airmail post or special courier shall be deemed (in the absence of evidence of earlier receipt) to have

been delivered ten (10) days after dispatch. In proving the fact of dispatch, it shall be sufficient to show that the envelope containing such notice was properly addressed, stamped and conveyed to the postal authorities or courier service for transmission by airmail or special courier.

- 5.1.3 Any notice delivered personally or sent by fax or E-mail shall be deemed to have been delivered on date of its dispatch.
- 5.1.4 Either party may change its postal, fax or E-mail address or addressee for receipt of such notices by ten (10) days' notice to the other party in writing.
- 5.2 Notices shall be deemed to include any approvals, consents, instructions, orders and certificates to be given under the Contract.
- 5.3 The Contractor shall provide at its own cost, and maintain in operation permanently during the duration of the Contract, such communications equipment which ensures that both written (fax or E-mail) and oral (voice) communications can be established at all times
 - (a) between the Road Manager and his senior field staff;
 - (b) between the Project Manager and the Road Manager;
 - (c) between the public telephone system and the Road Manager;
 - (d) The equipment to be provided and maintained includes the equipment located at the Project Manager's office.
- 5.4 At the Start Date of the Contract, the Contractor must communicate to the Employer the address of his office, including the postal, fax and Email address, which for the purposes of this contact is called the Road Management Office, where Notices will be addressed to. The Employer may require that the physical location of the Road Management Office is within the close geographical area of the Road. If the Contractor fails to communicate the address of his Road Management Office, and the Employer is otherwise unable to locate the Road Manager, all notifications to the Contractor shall be valid if they are deposited at a designated location within the office of the Project Manager, and if a copy is sent to the Contractor's legal address.
- 6. Settlement of Disputes (Alternative when using a Dispute
- 6.1 Dispute Review Board
 - 6.1.1 If any dispute of any kind whatsoever shall arise between the Employer and the Contractor in connection with or arising out of the Contract, including without prejudice to the generality of the foregoing, any question regarding its existence, validity

Review Board)

or termination, or the execution of the Works and Services—whether during the progress of the execution or after completion and whether before or after the termination, abandonment or breach of the Contract—the parties shall seek to resolve any such dispute or difference by mutual consultation. If the parties fail to resolve such a dispute or difference by mutual consultation, then the matter in dispute shall, in the first place, be referred in writing by either party to the Disputes Review Board ('the Board'), with a copy to the other party.

- 6.1.2 The Board shall be established when each of the three Board Members has signed a Board Member's Declaration of Acceptance as required by the DRB's Rules and Procedures (which, along with the Declaration of Acceptance form, are attached to the Contract). The Board shall comprise three Members experienced with the type of construction and services involved in the Contract and with the interpretation of contractual documents. One Member shall be selected by each of the Employer and the Contractor and approved by the other. If either of these Members is not so selected and approved within 28 days of the date of the Letter of Acceptance, then upon the request of either or both parties such Member shall be selected as soon as practicable by the Appointing Authority specified in the PC. The third Member shall be selected by the other two and approved by the parties. If the two Members selected by or on behalf of the parties fail to select the third Member within 14 days after the later of their selections, or if within 14 days after the selection of the third Member, the parties fail to approve that Member, then upon the request of either or both parties such third Member shall be selected promptly by the same Appointing Authority specified in the PC who shall seek the approval of the proposed third Member by the parties before selection but, failing such approval, nevertheless shall select the third Member. The third Member shall serve as Chairman of the Board.
- 6.1.3 In the event of death, disability, or resignation of any Member, such Member shall be replaced in the same manner as the Member being replaced was selected. If for whatever other reason a Member shall fail or be unable to serve, the Chairman (or failing the action of the Chairman then either of the other Members) shall inform the parties and such nonserving Member shall be replaced in the same manner as the Member being replaced was selected. Any replacement made by the parties shall be completed within 28 days after the event giving rise to the vacancy on the Board, failing which the replacement

shall be made by the Appointing Authority in the same manner as described above. Replacement shall be considered completed when the new Member signs the Board Member's Declaration of Acceptance. Throughout any replacement process the Members not being replaced shall continue to serve and the Board shall continue to function and its activities shall have the same force and effect as if the vacancy had not occurred, provided, however, that the Board shall not conduct a hearing nor issue a Recommendation until the replacement is completed.

- 6.1.4 Either the Employer or the Contractor may refer a dispute to the Board in accordance with the provisions of the DRB's Rules and Procedures, attached to the Contract. The Recommendation of the Board shall be binding on both parties, who shall promptly give effect to it unless and until the same shall be revised, as hereinafter provided, in an arbitral award. Unless the Contract has already been repudiated or terminated, the Contractor shall continue to proceed with the Works and Services in accordance with the Contract.
- 6.1.5 If either the Employer or the Contractor is dissatisfied with any Recommendation of the Board, or if the Board fails to issue its Recommendation within 56 days after receipt by the Chairman of the Board of the written Request for Recommendation, then either the Employer or the Contractor may, within 14 days after his receipt of the Recommendation, or within 14 days after the expiry of the said 56-day period, as the case may be, give notice to the other party of his intention to commence arbitration, as hereinafter provided, as to the matter in dispute. Such notice shall establish the entitlement of the party giving the same to commence arbitration, as hereinafter provided, as to such dispute and, subject to Sub-Clause 6.3, no arbitration in respect thereof may be commenced unless such notice is given.
- 6.1.6 If the Board has issued a Recommendation to the Employer and the Contractor within the said 56 days and no notice of intention to commence arbitration as to such dispute has been given by either the Employer or the Contractor within 14 days after the parties received such Recommendation from the Board, the Recommendation shall become final and binding upon the Employer and the Contractor.
- 6.1.7 Whether or not it has become final and binding upon the Employer and the Contractor, a Recommendation shall be

- admissible as evidence in any subsequent dispute resolution procedure, including any arbitration or litigation having any relation to the dispute to which the Recommendation relates.
- 6.1.8 All Recommendations that have become final and binding shall be implemented by the parties forthwith.

6.2 Arbitration

- 6.2.1 If either the Employer or the Contractor is dissatisfied with the Board's decision, then either the Employer or the Contractor may, in accordance with Sub-Clause 6.1.5, give notice to the other party of its intention to commence arbitration, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given. The arbitral tribunal shall have full power to open up, review, and revise any decision, opinion, instruction, determination, certificate, and any Recommendation(s) of the Board.
- 6.2.2 Any dispute in respect of which a notice of intention to commence arbitration has been given, in accordance with GC Sub-Clause 6.2.1, shall be finally settled by arbitration. Neither party shall be limited in the proceedings before such arbitration tribunal to the evidence or arguments put before the Board for the purpose of obtaining his Recommendation(s) pursuant to Sub-Clause 6.2.1. No Recommendation shall disqualify the Board from being called as a witness and giving evidence before the arbitrator(s) on any matter whatsoever relevant to the dispute Arbitration may be commenced prior to or after completion of the Works and Services.
- 6.2.3 Arbitration proceedings shall be conducted in accordance with the rules of procedure designated in the PC.
- 6.3 Where neither the Employer nor the Contractor has given notice of intention to commence arbitration of a dispute within the period stated in Sub-Clause 6.1.5 and the related Recommendation has become final and binding, either party may, if the other party fails to comply with such Recommendation and without prejudice to any other right it may have, refer the failure to arbitration in accordance with Sub-Clause 6.2. The provisions of Sub-Clause 6.1 shall not apply to any such reference
- 6.4 Notwithstanding any reference to the Board or Arbitration herein,
 - (a) the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree

(b) the Employer shall pay the Contractor any monies due the Contractor.

6. Settlement of Disputes (Alternative when using a Dispute Review Expert)

6.1 Dispute Review Expert

- 6.1.1 If any dispute of any kind whatsoever shall arise between the Employer and the Contractor in connection with or arising out of the Contract, including without prejudice to the generality of the foregoing, any question regarding its existence, validity or termination, or the execution of the Works and Services—whether during the progress of the execution or after completion and whether before or after the termination, abandonment or breach of the Contract—the parties shall seek to resolve any such dispute or difference by mutual consultation. If the parties fail to resolve such a dispute or difference by mutual consultation, then the matter in dispute shall, in the first place, be referred in writing by either party to the Disputes Review Expert ('DRE'), with a copy to the other party.
- 6.1.2 The DRE shall take up his functions after having signed a DRE's Declaration of Acceptance as required by the DRE's Rules and Procedures (which, along with the Declaration of Acceptance form, are attached to the Contract). The DRE shall be a person experienced with the type of construction and services involved in the Contract and with the interpretation of contractual documents and shall be selected by agreement between the Employer and the Contractor. If the DRE is not selected within 28 days of the date of the Letter of Acceptance, then upon the request of either or both parties the DRE shall be selected as soon as practicable by the Appointing Authority specified in the PC.
- 6.1.3 In the event of death, disability, or resignation of the DRE, the latter shall be replaced by agreement between the Employer and the Contractor. Any replacement made by the parties shall be completed within 28 days after the event giving rise to the need for a replacement, failing which the replacement shall be made by the same international appointing authority as above.
- 6.1.4 Either the Employer or the Contractor may refer a dispute to the DRE in accordance with the provisions of the DRE's Rules and Procedures, attached to the Contract. The Recommendation of the DRE shall be binding on both parties, who shall promptly give effect to it unless and until the same shall be revised, as hereinafter provided, in an arbitral award. Unless the Contract has already been repudiated or terminated,

- the Contractor shall continue to proceed with the Works and Services in accordance with the Contract.
- 6.1.5 If either the Employer or the Contractor is dissatisfied with any Recommendation of the DRE, or if the DRE fails to issue his Recommendation within 56 days after he has received the written Request for Recommendation, then either the Employer or the Contractor may, within 14 days after his receipt of the Recommendation, or within 14 days after the expiry of the said 56-day period, as the case may be, give notice to the other party of his intention to commence arbitration, as hereinafter provided, as to the matter in dispute. Such notice shall establish the entitlement of the party giving the same to commence arbitration, as hereinafter provided, as to such dispute and, subject to Sub-Clause 6.3, no arbitration in respect thereof may be commenced unless such notice is given.
- 6.1.6 If the DRE has issued a Recommendation to the Employer and the Contractor within the said 56 days and no notice of intention to commence arbitration as to such dispute has been given by either the Employer or the Contractor within 14 days after the parties received such Recommendation from the DRE, the Recommendation shall become final and binding upon the Employer and the Contractor.
- 6.1.7 Whether or not it has become final and binding upon the Employer and the Contractor, a Recommendation shall be admissible as evidence in any subsequent dispute resolution procedure, including any arbitration or litigation having any relation to the dispute to which the Recommendation relates.
- 6.1.8 All Recommendations that have become final and binding shall be implemented by the parties forthwith.

6.2 Arbitration

6.2.1 If either the Employer or the Contractor is dissatisfied with the DRE's decision, then either the Employer or the Contractor may, in accordance with Sub-Clause 6.1.5, give notice to the other party of its intention to commence arbitration, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given. The arbitral tribunal shall have full power to open up, review, and revise any decision, opinion, instruction, determination, certificate, and any Recommendation(s) of the DRE.

- 6.2.2 Any dispute in respect of which a notice of intention to commence arbitration has been given, in accordance with GC Sub-Clause 6.2.1, shall be finally settled by arbitration. Neither party shall be limited in the proceedings before such arbitration tribunal to the evidence or arguments put before the DRE for the purpose of obtaining his Recommendation(s) pursuant to Sub-Clause 6.2.1. No Recommendation shall disqualify the DRE from being called as a witness and giving evidence before the arbitrator(s) on any matter whatsoever relevant to the dispute Arbitration may be commenced prior to or after completion of the Works and Services.
- 6.2.3 Arbitration proceedings shall be conducted in accordance with the rules of procedure designated in the PC.
- 6.3 Where neither the Employer nor the Contractor has given notice of intention to commence arbitration of a dispute within the period stated in Sub-Clause 6.1.5 and the related Recommendation has become final and binding, either party may, if the other party fails to comply with such Recommendation and without prejudice to any other right it may have, refer the failure to arbitration in accordance with Sub-Clause 6.2. The provisions of Sub-Clause 6.1 shall not apply to any such reference
- 6.4 Notwithstanding any reference to the DRE or Arbitration herein,
 - (a) the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree
 - (b) the Employer shall pay the Contractor any monies due the Contractor.

B. ASSIGNMENT OF RESPONSIBILITIES

7. Scope of Works and Services

7.1 Unless otherwise expressly limited in the Specifications, the Contractor's obligations cover the Design, the carrying out of all Works and the performance of all Services required for keeping the Road in accordance with the Service Levels defined in the Specifications, while at the same time respecting the plans, procedures, specifications, drawings, codes and any other documents as identified in the Specifications. Such specifications include, but are not limited to, the provision of supervision and engineering services; the supply of labor, materials, equipment; Contractor's Equipment; construction utilities and supplies; temporary materials, structures and facilities; transportation (including, without limitation, unloading and hauling to, from and

at the Site); and storage, except for those supplies, works and services that will be provided or performed by the Employer, if any, as set forth in the corresponding Specifications.

7.2 The Contractor shall, unless specifically excluded in the Contract, perform all such work, services and/or supply all such items and materials not specifically mentioned in the Contract but that can be reasonably inferred from the Contract as being required for attaining the Performance Standards (as specified in Clause 24 of GC) as if such work, services and/or items and materials were expressly mentioned in the Contract.

8. Design Responsibility

8.1 The Contractor shall be responsible for the design and programming of the Works and Services, and for the accuracy and completeness of the information used for that design and programming in accordance with the requirements established in the Specifications.

8.2 Specifications and Drawings

8.2.1 The Contractor shall execute the basic and detailed design and the engineering work in compliance with the provisions of the Contract and the Specifications, or where not so specified, in accordance with good engineering practice.

The Contractor shall be responsible for any discrepancies, errors or omissions in the specifications, drawings and other technical documents that it has prepared, whether such specifications, drawings and other documents have been approved by the Project Manager or not, provided that such discrepancies, errors or omissions are not because of inaccurate information furnished in writing to the Contractor by or on behalf of the Employer.

8.2.2 The Contractor shall be entitled to disclaim responsibility for any design, data, drawing, specification or other document, or any modification thereof, provided or designated by, or on behalf of, the Employer, by giving a notice of such disclaimer to the Project Manager.

8.3 Codes and Standards

Wherever references are made in the Contract to codes and standards in accordance with which the Contract shall be executed, the edition or the revised version of such codes and standards current at the date twenty-eight (28) days prior to date of bid submission shall apply unless otherwise specified. During Contract execution, any changes in such codes and standards shall

be applied after approval by the Employer and shall be treated in accordance with GC Clause 63.

- 8.4 Approval/Review of Technical Documents by Project Manager
 - 8.4.1 For those Works specified in the PC, the Contractor shall prepare (or cause its Subcontractors to prepare) and furnish to the Project Manager the documents listed in the Specifications (List of Documents for Approval or Review) for its approval or review.

Unless otherwise specified in the PC, the Contractor shall not be required to submit for the Employer's approval the Design or other technical documents concerning the Maintenance Services remunerated through monthly lumpsum payments.

Any part of the Works covered by or related to the documents to be approved by the Project Manager shall be executed only after the Project Manager's approval thereof.

GC Sub-Clauses 8.4.2 through 8.4.7 shall apply only to those documents requiring the Project Manager's approval, but not to those furnished to the Project Manager for his information or review only.

8.4.2 Within fourteen (14) days after receipt by the Project Manager of any document requiring the Project Manager's approval in accordance with GC Sub-Clause 8.4.1, the Project Manager shall either return one copy thereof to the Contractor with its approval endorsed thereon or shall notify the Contractor in writing of its disapproval thereof and the reasons therefore and the modifications that the Project Manager proposes.

If the Project Manager fails to take such action within the said fourteen (14) days, then the said document shall be deemed to have been approved by the Project Manager.

- 8.4.3 The Project Manager shall not disapprove any document, except on the grounds that the document does not comply with some specified provision of the Contract or that it is contrary to good engineering practice.
- 8.4.4 If the Project Manager disapproves the document, the Contractor shall modify the document and resubmit it for the Project Manager's approval in accordance with GC SubClause 8.4.2. If the Project Manager approves the document

- subject to modification(s), the Contractor shall make the required modification(s), whereupon the document shall be deemed to have been approved.
- 8.4.5 If any dispute or difference occurs between the Employer and the Contractor in connection with or arising out of the disapproval by the Project Manager of any document and/or any modification(s) thereto that cannot be settled between the parties within a reasonable period, then such dispute or difference may be referred to the DRB (or DRE) for determination in accordance with GC Sub-Clause 6.1 hereof. If such dispute or difference is referred to the DRB (or DRE), the Project Manager shall give instructions as to whether and if so, how, performance of the Contract is to proceed. The Contractor shall proceed with the Contract in accordance with the Project Manager's instructions, provided that if the DRB (or DRE) upholds the Contractor's view on the dispute and if the Employer has not given notice under GC Sub-Clause 6.1.5 hereof, then the Contractor shall be reimbursed by the Employer for any additional costs incurred by reason of such instructions and shall be relieved of such responsibility or liability in connection with the dispute and the execution of the instructions as the DRB (or DRE) shall decide, and the Time for Completion shall be extended accordingly.
- 8.4.6 The Project Manager's approval, with or without modification of the document furnished by the Contractor, shall not relieve the Contractor of any responsibility or liability imposed upon it by any provisions of the Contract except to the extent that any subsequent failure results from modifications required by the Project Manager.
- 8.4.7 The Contractor shall not depart from any approved document unless the Contractor has first submitted to the Project Manager an amended document and obtained the Project Manager's approval thereof, pursuant to the provisions of this GC Sub-Clause 8.4.

If the Project Manager requests any change in any already approved document and/or in any document based thereon, the provisions of GC Clause 63.2 shall apply to such request.

9. Copyright

9.1 The copyright in all drawings, documents and other materials containing data and information furnished to the Employer by the Contractor herein shall remain vested in the Contractor or, if they

are furnished to the Employer directly or through the Contractor by any third party, including suppliers of materials, the copyright in such materials shall remain vested in such third party.

10. Start Date and Completion

- 10.1 The Contractor shall start the Works and Services within the period specified in the PC. Upon request from the Contractor, the Employer shall confirm in writing the Start Date, after verifying that works and services have started on the Site.
- 10.2 The Contractor shall attain the required Service Levels and the Completion of the Rehabilitation and Improvement Works (or of a part where a separate time for Completion of such part is specified in the Contract) within the time schedules included in the PC and the Specifications, or within such extended time to which the Contractor shall be entitled under GC Clause 64 hereof.

11. Contractor's Responsibilities

- 11.1 The Contractor shall design and carry out the Works and Services (including associated purchases and/or subcontracting) necessary to comply with the requirements established in the Specifications with due care and diligence in accordance with the Contract.
- 11.2 The Contractor confirms that it has entered into this Contract on the basis of a proper examination of the data relating to the Works and Services required, including any data and tests provided by the Employer, and on the basis of information that the Contractor could have obtained from a visual inspection of the Site and of other data readily available to it relating to the Road as of the date twenty-eight (28) days prior to bid submission. The Contractor acknowledges that any failure to acquaint itself with all such data and information shall not relieve its responsibility for properly estimating the difficulty or cost of successfully performing the Works and Services.
- 11.3 The Contractor shall acquire in its name all permits, approvals and/or licenses from all local, state or national government authorities or public service undertakings in the country of the Employer that are necessary for the performance of the Contract, including, without limitation, visas for the Contractor's and Subcontractor's personnel and entry permits for all imported Contractor's Equipment. The Contractor shall acquire all other permits, approvals and/or licenses that are not the responsibility of the Employer under GC Sub-Clause 14.3 hereof and that are necessary for the performance of the Contract.
- 11.4 The Contractor shall comply with all laws in force in the country of the Employer and where the Works and Services are carried out. The laws will include all local, state, national or other laws that

affect the performance of the Contract and bind upon the Contractor. The Contractor shall indemnify and hold harmless the Employer from and against any and all liabilities, damages, claims, fines, penalties and expenses of whatever nature arising or resulting from the violation of such laws by the Contractor or its personnel, including the Subcontractors and their personnel, but without prejudice to GC Sub-Clause 14.1 hereof.

- 11.5 Any Plant, Material and Services that will be incorporated in or be required for the Works and Services and other supplies shall have their origin in an eligible Country as defined under the Bank's procurement guidelines.
- 11.6 The Contractor shall permit the Bank and/or persons appointed by the Bank to inspect the Site and/or the accounts and records of the Contractor and its subcontractors relating to the performance of the Contract, and to have such accounts and records audited by auditors appointed by the Bank if required by the Bank. The Contractor's attention is drawn to Sub-Clause 59.2.1 which provides, inter alia, that acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under Sub-Clause 11.6 constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility under the Procurement Guidelines).

12. Subcontracting

- 12.1 The Contractor may subcontract activities listed in the PC. Any other activity under the Contract may be subcontracted only when approved by the Project Manager. The Contractor may not assign the entire Contract without the approval of the Employer in writing. Subcontracting shall not alter the Contractor's obligations nor relieve the Contractor from any liability or obligation under the Contract and he shall be responsible for the acts, defaults and neglects of any Subcontractor, his agents, servants or workmen as fully as if they were the acts, defaults or neglects of the Contractor, his agents, servants or workmen.
- 12.2 Notwithstanding GC Sub-Clause 12.1, the Contractor may subcontract under his own responsibility and without prior approval of the Employer the small Works and Services also listed in the PC.

13. Assignment of Contract

13.1 Neither the Employer nor the Contractor shall, without the express prior written consent of the other party (which consent shall not be unreasonably withheld), assign to any third party the Contract or any part thereof, or any right, benefit, obligation or interest therein or thereunder, except that the Contractor shall be entitled to assign either absolutely or by way of charge any monies due and payable

to it or that may become due and payable to it under the Contract.

14. Employer's Responsibilities

- 14.1 The Employer shall apply due diligence to ensure the accuracy of all information and/or data to be supplied to the Contractor as described in the Specifications, except when otherwise expressly stated in the Contract.
- 14.2 The Employer shall be responsible for acquiring and providing legal and physical possession of the Site and access thereto, and for providing possession of and access to all other areas reasonably required for the proper execution of the Contract, including all requisite rights of way, as specified in the corresponding Specifications. The Employer shall give full possession of and accord all rights of access thereto on or before the date(s) specified in the PC.
- 14.3 The Employer shall acquire and pay for all permits, approvals and/or licenses from all local, state or national government authorities or public service undertakings in the country where the Site is located, when such authorities or undertakings require the Employer to obtain them in the Employer's name, are necessary for the execution of the Contract, and are specified in the corresponding Specifications.
- 14.4 If requested by the Contractor, the Employer shall use its best endeavors to assist the Contractor in obtaining in a timely and expeditious manner all permits, approvals and/or licenses necessary for the execution of the Contract from all local, state or national government authorities or public service undertakings that such authorities or undertakings require the Contractor or Subcontractors or the personnel of the Contractor or Subcontractors, as the case may be, to obtain.
- 14.5 The Employer shall be responsible for the continued operation of the Road after Completion, in accordance with GC Sub-Clause 28, and shall be responsible for facilitating the Guarantee Test(s) for the Road, in accordance with GC Sub-Clause 20.
- 14.6 All costs and expenses involved in the performance of the obligations under this GC Clause 14 shall be the responsibility of the Employer, save those to be incurred by the Contractor with respect to the performance of Guarantee Tests, in accordance with GC Sub-Clause 20.

15. Confidential Information

15.1 The Employer and the Contractor shall keep confidential and shall not, without the written consent of the other party hereto, divulge to any third party any documents, data or other information

furnished directly or indirectly by the other party hereto in connection with the Contract, whether such information has been furnished prior to, during or following termination of the Contract. Notwithstanding the above, the Contractor may furnish to its Subcontractor(s) such documents, data and other information it receives from the Employer to the extent required for the Subcontractor(s) to perform its work under the Contract, in which event the Contractor shall obtain from such Subcontractor(s) an undertaking of confidentiality similar to that imposed on the Contractor under this GC Clause 15.

- 15.2 The Employer shall not use such documents, data and other information received from the Contractor for any purpose other than the operation and maintenance of the Road. Similarly, the Contractor shall not use such documents, data and other information received from the Employer for any purpose other than the design, procurement of Plant and Equipment, construction or such Works and Services as are required for the performance of the Contract.
- 15.3 The obligation of a party under GC Sub-Clauses 15.1 and 15.2 above, however, shall not apply to that information which
 - (a) now or hereafter enters the public domain through no fault of that party;
 - (b) can be proven to have been possessed by that party at the time of disclosure and which was not previously obtained, directly or indirectly, from the other party hereto;
 - (c) otherwise lawfully becomes available to that party from a third party that has no obligation of confidentiality.
- 15.4 The above provisions of this GC Clause 15 shall not in any way modify any undertaking of confidentiality given by either of the parties hereto prior to the date of the Contract in respect of the Works and Services or any part thereof.
- 15.5 The provisions of this GC Clause 15 shall survive termination, for whatever reason, of the Contract.

C. EXECUTION OF WORKS AND SERVICES

16. Representa- 16.1

16.1 Project Manager

tives

If the Project Manager is not named in the Contract, then within fourteen (14) days of the issuance of the Letter of Acceptance by the Employer, the Employer shall appoint and notify the Contractor in writing of the name of the Project Manager. The Employer may from time to time appoint some other person as the Project Manager in place of the person previously so appointed, and shall give a notice of the name of such other person to the Contractor without delay. No such appointment shall be made at such a time or in such a manner as to impede the progress of the Works and Services. Such appointment shall only take effect upon receipt of such notice by the Contractor. The Project Manager shall represent and act for the Employer at all times during the period of the Contract. All notices, instructions, orders, certificates, approvals and all other communications under the Contract shall be given by the Project Manager, except as herein otherwise provided.

All notices, instructions, information and other communications given by the Contractor to the Employer under the Contract shall be given to the Project Manager, except as herein otherwise provided.

The Project Manager may delegate any of his duties and responsibilities to other people, except to the Adjudicator, after notifying the Contractor, and may cancel any delegation after notifying the Contractor.

16.2 Road Manager

- 16.2.1If the Road Manager is not named in the Contract, then the Contractor shall appoint the Road Manager before the Start Date and shall request the Employer in writing to approve the person so appointed. If the Employer makes no objection to the appointment within fourteen (14) days, the Road Manager shall be deemed to have been approved. If the Employer objects to the appointment within fourteen (14) days giving the reason therefore, then the Contractor shall appoint a replacement within fourteen (14) days of such objection, and the foregoing provisions of this GC Sub-Clause 16.2.1 shall apply thereto.
- 16.2.2The Road Manager shall represent and act for the Contractor at all times during the period of the Contract and shall give to the Project Manager all the Contractor's notices, instructions, information and all other communications under the Contract. The Road Manager shall be in charge of the day-to-day management of the works and services to be

provided under the contract on behalf of the Contractor, and shall have legal and all other faculties to take all necessary decisions related to the execution of the contract.

All notices, instructions, information and all other communications given by the Employer or the Project Manager to the Contractor under the Contract shall be given to the Road Manager or, in its absence, its deputy, except as herein otherwise provided.

The Contractor shall not revoke the appointment of the Road Manager without the Employer's prior written consent, which shall not be unreasonably withheld. If the Employer consents thereto, the Contractor shall appoint some other person as the Road Manager, pursuant to the procedure set out in GC Sub-Clause 16.2.1.

16.2.3The Road Manager may, subject to the approval of the Employer (which shall not be unreasonably withheld), at any time delegate to any person any of the powers, functions and authorities vested in him or her. Any such delegation may be revoked at any time. Any such delegation or revocation shall be subject to a prior notice to the Project Manager signed by the Road Manager, and shall specify the powers, functions and authorities thereby delegated or revoked. No such delegation or revocation shall take effect unless and until a copy thereof has been delivered to the Project Manager.

Any act or exercise by any person of powers, functions and authorities so delegated to him or her in accordance with this GC Sub-Clause 16.2.3 shall be deemed to be an act or exercise by the Road Manager.

- 16.2.4From the Start Date until Completion, the Road Manager shall supervise all work and services done at the Site by the Contractor and shall be present at the Site throughout normal working hours except when on leave, sick or absent for reasons connected with the proper performance of the Contract. Whenever the Road Manager is absent from the Site, a suitable person shall be appointed to act as his or her deputy.
- 16.2.5The Employer may by notice to the Contractor object to any representative or person employed by the Contractor in the execution of the Contract who, in the reasonable opinion of the Employer, may behave inappropriately, may be incompetent or

negligent, or may commit a serious breach of the Site regulations provided under the Specifications. The Employer shall provide evidence of the same, whereupon the Contractor shall remove such person from the Site.

16.2.6If any representative or person employed by the Contractor is removed in accordance with GC Sub-Clause 16.2.5, the Contractor shall, where required, promptly appoint a replacement.

17. Work Program 17.1 Contractor's Organization

The Contractor shall supply to the Project Manager a chart showing the proposed organization to be established by the Contractor for carrying out the Works and Services. The chart shall include the identities of the key personnel together with the curricula vitae of such key personnel to be employed as included in the Contractor's Bid. The Contractor shall promptly inform the Project Manager in writing of any revision or alteration of such an organization chart.

17.2 Program of Performance

Not later than the Start Date, the Contractor shall prepare and supply to the Project Manager a program of performance of the Contract, made in the form specified in the Specifications and showing the sequence in which it proposes to design and carry out the Works and Services, as well as the date by which the Contractor reasonably requires that the Employer shall have fulfilled its obligations under the Contract so as to enable the Contractor to execute the Contract in accordance with the program and to achieve Completion in accordance with the Contract. The Contractor shall update and revise the program as and when appropriate, but without modification in the Times for Completion given in the PC and any extension granted in accordance with GC Clause 64, and shall supply all such revisions to the Project Manager.

17.3 Progress Report

The Contractor shall monitor progress of all the activities specified in the program referred to in GC Sub-Clause 17.2 above, and supply a progress report to the Project Manager every month together with his Monthly Statement. The progress report shall be in a form acceptable to the Project Manager in accordance with the Specifications.

17.4 Progress of Execution

If at any time the Contractor's actual progress falls behind the program referred to in GC Sub-Clause 17.2, or it becomes apparent that it will so fall behind, the Contractor shall prepare and supply to the Project Manager a revised program, taking into account the prevailing circumstances, and shall notify the Project Manager of the steps being taken to expedite progress so as to attain Completion of the Works and Execution of Services activities within the Time for Completion under GC Sub-Clause 10.2, any extension thereof entitled under GC Sub-Clause 64, or any extended period as may otherwise be agreed upon between the Employer and the Contractor.

17.5 Work Procedures

The Contract shall be executed in accordance with the Contract Documents and the procedures given in the Specifications.

18. Execution of Works

18.1 Setting Out/Supervision/Labor

18.1.1*Bench Mark.* The Contractor shall be responsible for the true and proper setting-out of the Works in relation to bench marks, reference marks and lines provided to it in writing by or on behalf of the Employer.

If, at any time during the progress of execution of the Works, any error shall appear in the position, level or alignment of the Works, the Contractor shall forthwith notify the Project Manager of such error and, at its own expense, immediately rectify such error to the reasonable satisfaction of the Project Manager. If such error is based on incorrect data provided in writing by or on behalf of the Employer, the expense of rectifying the same shall be borne by the Employer.

18.1.2 Contractor's Supervision. The Contractor shall give or provide all necessary supervision during the execution of the Works, and the Road Manager or its deputy shall be on the Site to provide full-time supervision of the execution. The Contractor shall provide and employ only technical personnel who are skilled and experienced in their respective callings and supervisory staff who are competent to adequately supervise the work at hand.

18.2 Contractor's Equipment

18.2.1 All Contractor's Equipment brought by the Contractor onto

the Site shall be deemed to be intended to be used exclusively for the execution of the Contract. The Contractor shall not remove the same from the Site without informing the Project Manager.

- 18.2.2Unless otherwise specified in the Contract, upon completion of the Works and Services, the Contractor shall remove from the Site all Equipment brought by the Contractor onto the Site and any surplus materials remaining thereon.
- 18.2.3The Employer will, if requested, use its best endeavors to assist the Contractor in obtaining any local, state or national government permission required by the Contractor for the export of the Contractor's Equipment imported by the Contractor for use in the execution of the Contract that is no longer required for the execution of the Contract.

18.3 Site Regulations and Safety

The Employer and the Contractor shall establish Site regulations setting out the rules to be observed in the execution of the Contract at the Site and shall comply therewith. The Contractor shall prepare and submit to the Employer, with a copy to the Project Manager, proposed Site regulations for the Employer's approval, which approval shall not be unreasonably withheld.

Such Site regulations shall include, but shall not be limited to, rules in respect of security, safety, traffic control, accident response, gate control, sanitation, medical care, and fire prevention.

18.4 Access to site for Other Contractors

18.4.1The Contractor shall, upon written request from the Employer or the Project Manager, give site access to other contractors employed by the Employer on or near the site.

18.5 Site Clearance

- 18.5.1 Site Clearance in Course of Execution: In the course of carrying out the Contract, the Contractor shall keep the Site reasonably free from all unnecessary obstruction, store or remove any surplus materials, clear away any wreckage, rubbish or temporary works from the Site, and remove any Contractor's Equipment no longer required for execution of the Contract.
- 18.5.2 Clearance of Site after Completion: After Completion of all

parts of the Works and Services, the Contractor shall clear away and remove all wreckage, rubbish and debris of any kind from the Site, and shall leave the Site and the Road clean and safe.

18.6 Watching and Lighting

The Contractor shall provide and maintain at its own expense all lighting, fencing, and watching when and where necessary for the proper execution and the protection of the Works and Services, for the protection of his own installations and his equipment, for the safety of the owners and occupiers of adjacent property and for the safety of the public.

18.7 Access to the Site

The Contractor shall allow the Project Manager and any person authorized by the Project Manager access to the Site and to any place where work in connection with the Contract is being carried out or is intended to be carried out.

18.8 Management Meetings

- 18.8.1 Either the Project Manager or the Contractor may require the other to attend a management meeting. The business of a management meeting shall be to review the plans for remaining work and to deal with matters raised by either the Contractor or the Employer.
- 18.8.2 The Project Manager shall record the business of management meetings and provide copies of the record to those attending the meeting and to the Employer. The responsibility of the parties for actions to be taken shall be decided by the Project Manager either during or after the management meeting and stated in writing to all who attended the meeting.

19. Staff and Labor

19.1 The Contractor shall employ the key personnel named in the Contractor's Bid, to carry out the functions stated in the Specifications or other personnel approved by the Project Manager. The Project Manager will approve any proposed replacement of key personnel only if their relevant qualifications and abilities are substantially equal to or better than those of the personnel listed in the Contractor's Bid.

19.2 Labor

- (a) The Contractor shall provide and employ on the Site for the execution of the Works and Services such skilled, semi-skilled and unskilled labor as is necessary for the proper and timely execution of the Contract. The Contractor is encouraged to use local labor that has the necessary skills.
- (b) Unless otherwise provided in the Contract, the Contractor shall be responsible for the recruitment, transportation, accommodation and catering of all labor, local or expatriate, required for the execution of the Contract and for all payments in connection therewith.
- (c) The Contractor shall be responsible for obtaining all necessary permit(s) and/or visa(s) from the appropriate authorities for the entry of all labor and personnel to be employed on the Site into the country where the Site is located.
- (d) The Contractor shall at its own expense provide the means of repatriation to all of its and its Subcontractor's personnel employed on the Contract at the Site to their various home countries. It shall also provide suitable temporary maintenance of all such persons from the cessation of their employment on the Contract to the date programmed for their departure. In the event that the Contractor defaults in providing such means of transportation and temporary maintenance, the Employer may provide the same to such personnel and recover the cost of doing so from the Contractor.
- (e) The Contractor shall at all times during the progress of the Contract use its best endeavors to prevent any unlawful, riotous or disorderly conduct or behavior by or amongst its employees and the labor of its Subcontractors.
- (f) The Contractor shall provide lodging, medical assistance, alimentation and sanitary installations for the employees living in the contractor's base camps to comply with the Social, Sanitary and Health Conditions of Labor requirements established in the Specifications.
- (g) The Contractor shall, in all dealings with its labor and the labor of its Subcontractors currently employed on or connected with the Contract, pay due regard to all recognized festivals, official holidays, religious or other customs and all local laws and regulations pertaining to the employment of

labor.

- HIV-AIDS Prevention. (h) If so indicated in the PC, the Contractor shall conduct an HIV-AIDS awareness programme via an approved service provider or specialized NGO, and shall undertake such other measures as are specified in this Contract to reduce the risk of the transfer of the HIV virus between and among the Contractor's Personnel and the local community, to promote early diagnosis and to assist affected individuals. The Contractor shall throughout the contract: (i) conduct Information, Education and Consultation Communication (IEC) campaigns, at least every other month, addressed to all the Site staff and labor (including all the Contractor's employees, all Sub-Contractors and Consultants' employees working on the Site, and truck drivers and crew making deliveries to the Site for Works and Services executed under the contract, and to the immediate local communities, concerning the risks, dangers and impact, and appropriate avoidance behavior with respect to of Sexually Transmitted Diseases (STD)—or Sexually Transmitted Infections (STI) in general and HIV/AIDS in particular; (ii) provide male or female condoms for all Site staff and labor as appropriate; and (iii) provide for STI and HIV/AIDS screening, diagnosis, counseling and referral to a dedicated national STI and HIV/AIDS program, (unless otherwise agreed) of all Site staff and labor.
- If so indicated in the PC, the Contractor shall include in the program to be submitted for the execution of the Works and Services under Sub-Clause 17 a program for Site staff and labour and their families in respect of Sexually Transmitted Infections (STI) and Sexually Transmitted Diseases (STD) including HIV/AIDS. The STI, STD and HIV/AIDS alleviation program shall indicate when, how and at what cost the Contractor plans to satisfy the requirements of this Sub-Clause and the related specification. component, the program shall detail the resources to be provided or utilized and any related sub-contracting proposed. The program shall also include provision of a detailed cost estimate with supporting documentation. Payment the Contractor for preparation implementation this program shall not exceed the Provisional Sum dedicated for this purpose.

19.3 Removal of staff

If the Project Manager asks the Contractor to remove a person who is a member of the Contractor's staff or work force, stating the reasons, the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the work in the Contract.

19.4 Work at Night and on Holidays

19.4.1Unless otherwise provided in the Contract, if and when the Contractor considers it necessary to carry out work at night or on public holidays so as to meet the Service Levels and the Time for Completion, and requests the Employer's consent thereto (if such consent is needed), the Employer shall not unreasonably withhold such consent.

20. Test and Inspection

- 20.1 The Contractor shall at its own expense carry out on the Site all such tests and/or inspections as are specified in the Specifications, and in accordance with the procedures described in the Specifications.
- 20.2 The Employer and the Project Manager or their designated representatives shall be entitled to attend the aforesaid test and/or inspection.
- 20.3 For tests to be carried out on the initiative of the Contractor, whenever the Contractor is ready to carry out any such test and/or inspection, he shall give a reasonable advance notice of such test and/or inspection and of the place and time thereof to the Project Manager. The Contractor shall provide the Project Manager with a signed report of the results of any such test and/or inspection.
- 20.4 If the Employer or Project Manager (or their designated representatives) fails to attend a scheduled test and/or inspection, or if it is agreed between the parties that such persons shall not attend, then the Contractor may proceed with the test and/or inspection in the absence of such persons, and may provide the Project Manager with a signed report of the results thereof.
- 20.5 The Project Manager may require the Contractor to carry out any test and/or inspection not required by the Contract, provided that the Contractor's reasonable costs and expenses incurred in the carrying out of such test and/or inspection shall be added to the Contract Price. Further, if such test and/or inspection impedes the progress of the works and/or the Contractor's performance of its other obligations under the Contract, due allowance will be made in respect of the Time for Completion and the other obligations so

affected.

- 20.6 If Rehabilitation Works, Improvement Works or Emergency Works fail to pass any test and/or inspection, the Contractor shall either rectify or replace such works and shall repeat the test and/or inspection upon giving a notice under GC Sub-Clause 20.3.
- 20.7 If any dispute or difference of opinion shall arise between the parties in connection with or arising out of the test and/or inspection of the Works and Services, or part of them, that cannot be settled between the parties within a reasonable period of time, it may be referred to the RDB (or DRE) for determination in accordance with GC Sub-Clause 6.1.
- 20.8 The Contractor agrees that neither the execution of a test and/or inspection of the Works and Services or any part of them, nor the attendance by the Employer or the Project Manager, nor the issue of any test certificate pursuant to GC Sub-Clause 20.4, shall release the Contractor from any other responsibilities under the Contract.
- 20.9 No part or foundations shall be covered up on the Site without the Contractor carrying out any test and/or inspection required under the Contract. The Contractor shall give a reasonable notice to the Project Manager whenever any such part or foundations are ready or about to be ready for test and/or inspection; such test and/or inspection and notice thereof shall be subject to the requirements of the Contract.
- 20.10 The Contractor shall uncover any part of the Works or foundations, or shall make openings in or through the same as the Project Manager may from time to time require at the Site, and shall reinstate and make good such part or parts.

If any parts of the Works or foundations have been covered up at the Site after compliance with the requirement of GC Sub-Clause 20.9 and are found to be executed in accordance with the Contract, the expenses of uncovering, making openings in or through, reinstating, and making good the same shall be borne by the Employer, and the Time for Completion shall be reasonably adjusted to the extent that the Contractor has thereby been delayed or impeded in the performance of any of its obligations under the Contract.

21. Rehabilitation Works

21.1 If so indicated in the PC, specific Rehabilitation Works shall be carried out explicitly in accordance with the Specifications and as specified in the bidding documents and in the Contractor's Bid.

Input quantities for Rehabilitation Works were estimated by the Contractor to achieve the performance criteria for Rehabilitation Works given in the Specifications. The specific Rehabilitation Works were offered by the Contractor at a Lump-Sum price.

22. Improvement Works

- 22.1 If so indicated in the PC, Improvement Works are required and will consist of a set of interventions that add new characteristics to the roads in response to new traffic and safety or other conditions. Improvement Works quantities were offered at unit prices included in the Bill of Quantities.
- 22.2 The execution of Improvement Works shall be requested by the Project Manager, who will issue a Work Order defining the requested works to be carried out by the Contractor, based on the activities priced in the Bill of Quantities. The Work order shall specify the activities to be carried out and the corresponding price. The Road Manager shall confirm his acceptance by signing the Work Order.

23. Maintenance Services

23.1 Maintenance Services are those activities necessary for keeping the Road in compliance with the Performance Standards pursuant to GC Clause 24. Maintenance Services shall include all activities required to achieve and keep the Road Performance Standards and Service Levels. These Services will be remunerated by Lump-Sum amount for the period of the contract paid in fixed monthly payments during the entire Contract period.

24. Performance Standards

24.1 The Contractor shall carry out the Maintenance Services to achieve and keep the Road complying with the Service Levels defined in the Specifications. He will carry out all Works in accordance with the performance standards indicated in the Specifications.

25. Contractor's Self-Control of Quality and Safety

- 25.1The Contractor shall, throughout the execution and completion of the Works and Services, maintain a System which shall ensure that the work methods and procedures are adequate and safe at all times and do not pose any avoidable risks and dangers to the health, safety and property of the workers and agents employed by him or any of his subcontractors, of road users, of persons living in the vicinity of the roads under contract, and any other person who happens to be on or along the roads under contract.
- 25.2 Unless specified otherwise in the PC, the Contractor shall establish, within his own organizational structure, a specific Unit staffed with qualified personnel, whose task is to verify continuously the degree of compliance by the Contractor with the required Service Levels. That Unit will also be responsible for the generation and presentation of the information needed by the contractor for the

documentation required as defined in the Specifications. The Unit will be responsible for maintaining a detailed and complete knowledge of the condition of the Road and to provide to the Road Manager all the information needed in order to efficiently manage and maintain the Road. The Unit shall also carry out, in close collaboration with the Project Manager, the verifications on the Service Levels.

25.3 The Contractor's Self-Control Unit mentioned in GC Sub-Clause 25.2 shall report the level of compliance with the required Service Levels in the standard format presented in the Specifications.

26. Environmental and Safety Requirements

- 26.1 The Contractor shall, throughout the design, execution and completion of the Works and Services, and the remedying of any defects therein:
 - (a) have full regard for the safety of all persons employed by him and his subcontractors and keep the Site (so far as the same is under his control) in an orderly state appropriate to the avoidance of danger to such persons;
 - (b) provide and maintain at his own cost all guardrails, fencing, warning signs and watching, when and where necessary or required by Sub-Clause 18.3 of the Contract or by any duly constituted authority, for the protection of the Works and Services or for the safety and convenience of his workers and road users, the public or others; and
 - (c) take all reasonable steps to protect the environment (both on and off the Site) and to limit damage and nuisance to people and property resulting from pollution, noise and other results of his operations.

27. Work Orders for Improvement Works and Emergency Works

- 27.1 Improvement Works and Emergency Works shall be executed by the Contractor on the basis of Work Orders issued by the Project Manager.
- 27.2 Work Orders shall be issued in writing and shall include the date on which the Work Order was issued and the signature of the Project Manager. Two copies of the Work Order shall be transmitted by the Project Manager to the Contractor, who shall immediately countersign one copy, including the date of acceptance, and return it to the Project Manager.
- 27.3 If the Contractor has any objection to a Work Order, the Road Manager shall notify the Project Manager of his reasons for such objection within ten (10) days) of the date of issuing the Work Order. Within five (5) days of the Road Manager's objection, the Project Manager shall cancel,

modify or confirm the Work Order in writing.

28. Taking Over Procedures

- 28.1 When the whole of the Works and Services have been substantially completed and have satisfactorily passed any Tests on Completion prescribed by the Contract, the Contractor may give a notice to that effect to the Project Manager, accompanied by a written undertaking to finish with due expedition any outstanding work during the Defects Liability Period. Such notice and undertaking shall be deemed to be a request by the Contractor for the Project Manager to issue a Taking-Over Certificate in respect of the Works and Services. The Project Manager shall, within twenty-one (21) days of the date of delivery of such notice, either issue to the Contractor a Taking-Over Certificate, stating the date on which the Works and Services were substantially completed in accordance with the Contract, or give instructions in writing to the Contractor specifying all the conditions to be complied with and all the work which is required to be done by the Contractor before the issue of such Certificate. The Project Manager shall also notify the Contractor of any defects in the Works and Services affecting substantial completion that may appear after such instructions and before completion of Taking-Over Certificate within twenty-one (21) days of completion, to the satisfaction of the Project Manager, of the Works and Services so specified and remedying any defects so notified.
- 28.2 Similarly, in accordance with the procedure set out in Sub-Clause 28.1, the Contractor may request and the Project Manager shall issue a Taking-Over Certificate in respect of:
 - (a) any Section in respect of which a separate Time for Completion is provided in the contract,
 - (b) any substantial part of the Works and Services which has been both completed to the satisfaction of the Project Manager and, otherwise than as provided for in the Contract, occupied or used by the Employer, or
 - (c) any part of the Works and Services which the Employer has elected to occupy or use prior to completion (where such prior occupation or use is not provided for in the Contract or has not been agreed by the Contractor as a temporary measure).

29. Emergency Works

29.1 The need for execution of Emergency Works is jointly identified by the Employer and the Contractor and the starting of the execution of Emergency Works shall always require a Work Order issued by the Project Manager.

- 29.2 The execution of Emergency Works shall be requested by the Contractor based on losses or damages occurred as a result of natural phenomena (such as strong storms, flooding or earthquakes) with imponderable consequences, or on the possibility of damages or losses occurring, or the safety of individuals, works, services or equipment being at risk as result of the natural phenomena. In order to characterize the Emergency Works, the Contractor shall forward a Technical Report to the Project Manager requesting the execution of Emergency Works and characterizing the situation. On the basis of the said report, and of his own judgment of the situation, the Project Manager may issue a Work Order to the Contractor.
- 29.3 The Employer or even Government authorities may declare an Emergency Situation on the basis of local legislation. In those cases, the Project Manager may issue a Work Order for Emergency Works to the Contractor even without a request by the Contractor.
- 29.4 If the Contractor is unable or unwilling to do such work immediately, the Employer may do or cause such work to be done as the Employer may determine necessary in order to prevent damage to the Road. In such event the Employer shall, as soon as practicable after the occurrence of any such emergency, notify the Contractor in writing of such emergency, the work done and the reasons therefore. If the work done or caused to be done by the Employer is work that the Contractor was liable to do at its own expense under the Contract, the reasonable costs incurred by the Employer in connection therewith shall be paid by the Contractor to the Employer. Otherwise, the cost of such remedial work shall be borne by the Employer.

30. Quality of materials used by Contractor

- 30.1 The quality of materials used by the Contractor for the execution of the Contract shall be in compliance with the requirements of the Specifications. If the Contractor is of the opinion that materials of higher quality than those stated in the Specifications need to be used in order to ensure compliance with the Contract, he shall use such better materials, without being entitled to higher prices or remunerations.
- 30.2 Under no circumstances may the Contractor make any claim based on the insufficient quality of materials used by him, even if the material used was authorized by the Project Manager.
- 30.3 The Contractor shall carry out at his own cost the laboratory and other tests that he needs to verify if materials to be used comply

with the Specifications, and shall keep records of such tests. If requested by the Project Manager, the Contractor shall hand over the results of the tests.

31. Signalling and demarcation of work zones and bypasses

- 31.1 To ensure the safety of road users, including non-motorized road users and pedestrians, the Contractor is responsible to install and maintain at his cost the adequate signalling and demarcation of work sites, which in addition must comply with the applicable legislation.
- 31.2 If the execution of services and works under the contract is likely to interfere with traffic, the Contractor shall take at his cost the measures necessary to limit such interference to the strict minimum, or any danger to the workers or others. For that purpose, he is entitled to install, within the right-of-way of the road, temporary bypasses, structures or other modifications to be used by traffic during the execution of works and services. The Contractor shall notify the Project Manager of any such temporary installations.
- 31.3 If the execution of Works and Services by the Contractor makes it necessary to temporarily close a road section, and a traffic detour has to be implemented over other public roads or streets, the Contractor shall be responsible for the adequate signalling of the detour, under the same conditions as stated in GC Sub-Clause 31.1.
- 31.4 The Contractor shall inform the local authorities and the local police about such activities to be carried out by him which may cause any significant interruptions or changes to the normal traffic patterns. Such information shall be made in writing and at least seven (7) days before the beginning of such activities. Upon request from the Contractor, the Employer shall assist the Contractor in the coordination with the local authorities and the local police.

D. ALLOCATION OF RISKS

32. Employer's Risks

- 32.1 From the Start Date until the Defects Correction Certificate has been issued, the following are Employer's risks insofar as they directly affect the execution of the Works and Services included in this Contract:
 - (a) war, hostilities (whether war be declared or not), invasion, act of foreign enemies;
 - (b) rebellion, revolution, insurrection, military or usurped power,

or civil war;

- (c) ionising radiations, contamination by radioactivity from any nuclear fuel, or any nuclear waste from the combustion of nuclear fuel, radioactive toxic explosive or other hazardous properties of any explosive nuclear assembly or nuclear component thereof;
- (d) riot, commotion or disorder, unless solely restricted to employees of the Contractor or of his Subcontractors and arising from the conduct of the Works and Services;
- (e) loss or damage due to the use or occupation by the Employer of any unfinished Section or part of the Works, except as may be provided for in the Contract;
- (f) any operation of the forces of nature against which an experienced contractor could not reasonably have been expected to take precautions.
- 33. Contractor's Risks
- 33.1 The Employer carries the risks which this Contract states are Employer's risks, and the remaining risks are the Contractor's risks.
- 34. Loss of or Damage to Property; Accident or Injury to Workers; Indemnification
- 34.1 Subject to GC Sub-Clause 34.3, the Contractor shall indemnify and hold harmless the Employer and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of whatsoever nature, including attorney's fees and expenses, in respect of the death or injury of any person or loss of or damage to any property arising in connection with the execution and by reason of the negligence of the Contractor or its Subcontractors, or their employees, officers or agents, except any injury, death or property damage caused by the negligence of the Employer, its contractors, employees, officers or agents.
- 34.2 If any proceedings are brought or any claim is made against the Employer that might subject the Con tractor to liability under GC Sub-Clause 34.1, the Employer shall promptly give the Contractor a notice thereof and the Contractor may at its own expense and in the Employer's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.

If the Contractor fails to notify the Employer within twenty-eight (28) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Employer shall be free to conduct the same on its own behalf. Unless the Contractor has so failed to notify the Employer within the twenty-eight (28) day

period, the Employer shall make no admission that may be prejudicial to the defense of any such proceedings or claim.

The Employer shall, at the Contractor's request, afford all available assistance to the Contractor in conducting such proceedings or claim, and shall be reimbursed by the Contractor for all reasonable expenses incurred in so doing.

- 34.3 The Employer shall indemnify and hold harmless the Contractor and its employees, officers and Subcontractors from any liability for loss of or damage to property of the Employer, other than the Works not yet taken over, that is caused by fire, explosion or any other perils, in excess of the amount recoverable from insurances procured under GC Clause 35, provided that such fire, explosion or other perils were not caused by any act or failure of the Contractor.
- 34.4 The party entitled to the benefit of an indemnity under this GC Clause 34 shall take all reasonable measures to mitigate any loss or damage which has occurred. If the party fails to take such measures, the other party's liabilities shall be correspondingly reduced.
- 35. Insurance
- 35.1 To the extent specified in the PC, the Contractor shall at its expense take out and maintain in effect, or cause to be taken out and maintained in effect, during the performance of the Contract, the insurances set forth below in the sums and with the deductibles and other conditions specified in the said PC. The identity of the insurers and the form of the policies shall be subject to the approval of the Employer, who should not unreasonably withhold such approval.
 - (a) Loss of or damage to the Plant and MaterialsCovering loss or damage occurring prior to Completion.
 - (b) Third Party Liability Insurance

Covering bodily injury or death suffered by third parties (including the Employer's personnel) and loss of or damage to property occurring in connection with Works and Services.

(c) Automobile Liability Insurance

Covering use of all vehicles used by the Contractor or its Subcontractors (whether or not owned by them) in connection with the execution of the Contract.

(d) Workers' Compensation

In accordance with the statutory requirements applicable in any

country where the Contract or any part thereof is executed.

(e) Employer's Liability

In accordance with the statutory requirements applicable in any country where the Contract or any part thereof is executed.

(f) Other Insurances

Such other insurances as may be specifically agreed upon by the parties.

- 35.2 The Employer shall be named as co-insured under all insurance policies taken out by the Contractor pursuant to GC Sub-Clause 35.1, except for the Third Party Liability, Workers' Compensation and Employer's Liability Insurances, and the Contractor's Subcontractors shall be named as co-insured under all insurance policies taken out by the Contractor pursuant to GC Sub-Clause 35.1 except for the Cargo Insurance During Transport, Workers' Compensation and Employer's Liability Insurances. All insurer's rights of subrogation against such co-insured for losses or claims arising out of the performance of the Contract shall be waived under such policies.
- 35.3 The Contractor shall deliver to the Employer certificates of insurance (or copies of the insurance policies) as evidence that the required policies are in full force and effect. The certificates shall provide that no less than twenty-one (21) days' notice shall be given to the Employer by insurers prior to cancellation or material modification of a policy.
- 35.4 The Contractor shall ensure that, where applicable, its Subcontractor(s) shall take out and maintain in effect adequate insurance policies for their personnel and vehicles and for work executed by them under the Contract, unless such Subcontractors are covered by the policies taken out by the Contractor.
- 35.5 If the Contractor fails to take out and/or maintain in effect the insurances referred to in GC Sub-Clause 35.1, the Employer may take out and maintain in effect any such insurances and may from time to time deduct from any amount due the Contractor under the Contract any premium that the Employer shall have paid to the insurer, or may otherwise recover such amount as a debt due from the Contractor.
- 35.6 Unless otherwise provided in the Contract, the Contractor shall prepare and conduct all and any claims made under the policies effected by it pursuant to this GC Clause 35, and all monies payable

by any insurers shall be paid to the Contractor. The Employer shall give to the Contractor all such reasonable assistance as may be required by the Contractor. With respect to insurance claims in which the Employer's interest is involved, the Contractor shall not give any release or make any compromise with the insurer without the prior written consent of the Employer. With respect to insurance claims in which the Contractor's interest is involved, the Employer shall not give any release or make any compromise with the insurer without the prior written consent of the Contractor.

36. Unforeseen Conditions

- 36.1 If, during the execution of the Contract, the Contractor shall encounter on the Site any physical conditions (other than climatic conditions) or artificial obstructions that could not have been reasonably foreseen prior to the date of the Contract Agreement by an experienced contractor on the basis of reasonable examination of the data relating to the Road (including any data and tests provided by the Employer), and on the basis of information that it could have obtained from a visual inspection of the Site or other data readily available to it relating to the Road, and if the Contractor determines that it will in consequence of such conditions or obstructions incur additional cost and expense or require additional time to perform its obligations under the Contract that would not have been required if such physical conditions or artificial obstructions had not been encountered, the Contractor shall promptly, and before performing additional work or using additional Plant and Equipment or Contractor's Equipment, notify the Project Manager in writing of
 - (a) the physical conditions or artificial obstructions on the Site that could not have been reasonably foreseen;
 - (b) the additional work and/or Plant and Equipment and/or Contractor's Equipment required, including the steps which the Contractor will or proposes to take to overcome such conditions or obstructions;
 - (c) the extent of the anticipated delay;
 - (d) the additional cost and expense that the Contractor is likely to incur.

On receiving any notice from the Contractor under this GC Sub-Clause 36.1, the Project Manager decide upon the actions to be taken to overcome the physical conditions or artificial obstructions encountered. Following such consultations, the Project Manager shall instruct the Contractor, with a copy to the Employer, of the actions to be taken.

- 36.2 Any reasonable additional cost and expense incurred by the Contractor in following the instructions from the Project Manager to overcome such physical conditions or artificial obstructions referred to in GC Sub-Clause 36.1 shall be paid by the Employer to the Contractor as an addition to the Contract Price.
- 36.3 If the Contractor is delayed or impeded in the performance of the Contract because of any such physical conditions or artificial obstructions referred to in GC Sub-Clause 36.1, the Time for Completion shall be extended in accordance with GC Clause 64.

37. Change in Laws and Regulations

37.1 If, after the date twenty-eight (28) days prior to the date of Bid submission, in the country where the Site is located, any law, regulation, ordinance, order or by-law having the force of law is enacted, promulgated, abrogated or changed (which shall be deemed to include any change in interpretation or application by the competent authorities) that subsequently affects the costs and expenses of the Contractor and/or the Time for Completion, the Contract Price shall be correspondingly increased or decreased, and/or the Time for Completion shall be reasonably adjusted to the extent that the Contractor has thereby been affected in the performance of any of its obligations under the Contract. Notwithstanding the foregoing, such additional or reduced costs shall not be separately paid or credited if the same has already been accounted for in the price adjustment provisions where applicable, in accordance with the PC.

38. Force Majeure

- 38.1 "Force Majeure" shall mean any event beyond the reasonable control of the Employer or of the Contractor, as the case may be, insofar as they directly affect the execution of the Services and Works included in this Contract and which is unavoidable notwithstanding the reasonable care of the party affected, and shall include, without limitation, the following:
 - (a) war, hostilities or warlike operations (whether a state of war be declared or not), invasion, act of foreign enemy and civil war;
 - rebellion, revolution, insurrection, mutiny, usurpation of civil or military government, conspiracy, riot, civil commotion and terrorist acts;
 - (c) confiscation, nationalization, mobilization, commandeering, requisition by or under the order of any government or de jure or de facto authority or ruler or any other act or failure to act of any local state or national government authority;
 - (d) strike, sabotage, lockout, embargo, import restriction, port

- congestion, lack of usual means of public transportation and communication, industrial dispute, shipwreck, shortage or restriction of power supply, epidemics, quarantine and plague;
- (e) earthquake, landslide, volcanic activity, fire, flood or inundation, tidal wave, typhoon or cyclone, hurricane, storm, lightning, or other inclement weather condition, nuclear and pressure waves or other natural or physical disaster;
- (f) shortage of labor, materials or utilities where caused by circumstances that are themselves Force Majeure.
- 38.2 If either party is prevented, hindered or delayed from or in performing any of its obligations under the Contract by an event of Force Majeure, then it shall notify the other in writing of the occurrence of such event and the circumstances thereof within fourteen (14) days after the occurrence of such event.
- 38.3 The party who has given such notice shall be excused from the performance or punctual performance of its obligations under the Contract for so long as the relevant event of Force Majeure continues and to the extent that such party's performance is prevented, hindered or delayed. The Time for Completion shall be extended in accordance with GC Clause 64.
- 38.4 The party or parties affected by the event of Force Majeure shall use reasonable efforts to mitigate the effect thereof upon its or their performance of the Contract and to fulfill its or their obligations under the Contract, but without prejudice to either party's right to terminate the Contract under GC Sub-Clause 38.6.
- 38.5 No delay or nonperformance by either party hereto caused by the occurrence of any event of Force Majeure shall
 - (a) constitute a default or breach of the Contract;
 - (b) give rise to any claim for damages or additional cost or expense occasioned thereby;

if and to the extent that such delay or nonperformance is caused by the occurrence of an event of Force Majeure.

38.6 If the performance of the Contract is substantially prevented, hindered or delayed for a single period of more than sixty (60) days or an aggregate period of more than one hundred and twenty (120) days on account of one or more events of Force Majeure during the currency of the Contract, the parties will attempt to develop a mutually satisfactory solution, failing which either party may

- terminate the Contract by giving a notice to the other, but without prejudice to either party's right to terminate the Contract under GC Clause 59.
- 38.7 In the event of termination pursuant to GC Sub-Clause 38.6, the rights and obligations of the Employer and the Contractor shall be as specified in GC Sub-Clauses 59.1.2 and 59.1.3.
- 38.8 Notwithstanding GC Sub-Clause 38.5, Force Majeure shall not apply to any obligation of the Employer to make payments to the Contractor herein.

E. GUARANTEES AND LIABILITIES

39. Completion Time Guarantee and Liability

- 39.1 The Contractor guarantees that it shall attain specified Service Levels and the Completion of Rehabilitation and Improvement Works (or a part for which a separate time for completion is specified in the PC) within the time schedules specified in the PC and the Specifications, pursuant to GC Sub-Clause 10.2, or within such extended time to which the Contractor shall be entitled under GC Clause 64 hereof.
- 39.2 If the Contractor fails to attain specified Service Levels within the contractually agreed time schedules as given in the Specifications, the contractor shall receive reduced payments for Maintenance Services, for such default and not as a penalty, in accordance with the Specifications.
- 39.3 If the Contractor fails to attain the Completion of Rehabilitation and Improvement Works (or a part for which a separate time for completion is specified in the PC clause 39.1) within the contractually required time schedules, the contractor shall shall pay to the Employer liquidated damages for such default and not as a penalty, in accordance with the PC and the Specifications.
- 39.4 The payment reductions and liquidated damages indicated in GC 39.2 and 39.3 shall be the only monies due from the Contractor for such defaults, and they will be applied for every day of delay, in accordance with the PC and the Specifications. The aggregate amount of such liquidated damages and payment reductions shall in no event exceed the "aggregate liability" in accordance with GC Clause 42. The payment or deduction of such sums shall not relieve the Contractor from his obligation to complete the Works and Services, or from any other of his obligations amd liabilities under the Contract.

40. Performance Guarantee and Liability

- 40.1 The Contractor guarantees that during the Performance Tests or Inspections for Rehabilitation and Improvement Works, and for Emergency Works, the Road and all parts thereof shall attain the Performance Standards specified in the corresponding Specifications.
- 40.2 If, for reasons attributable to the Contractor, the minimum level of the Performance Standards specified in the corresponding Specifications are not met either in whole or in part, the Contractor shall at its cost and expense make such changes, modifications and/or additions to the Road or any part thereof as may be necessary to meet at least the minimum level of such Standards. The Contractor shall notify the Employer upon completion of the necessary changes, modifications and/or additions, and shall request the Employer to repeat the Test or Inspection until the minimum level of the Standards has been met. If the Contractor eventually fails to meet the minimum level of Performance Standard, the Employer may consider termination of the Contract, pursuant to GC Sub-Clause 59.2.2.
- 40.3 If, for reasons attributable to the Contractor, the Performance Standards relating to Rehabilitation and Improvement Works specified in the corresponding Specifications are not attained either in whole or in part, the Contractor shall, at the Contractor's choice, either
 - (a) make such changes, modifications and/or additions to the Works and Services or any part thereof that are necessary to attain the Performance Standards at its cost and expense, and shall request the Employer to repeat the Test, or
 - (b) pay liquidated damages to the Employer in respect of the Works and Services which fail to meet the Performance Standards in accordance with the provisions in the corresponding Specifications.
- 40.4 The payment of liquidated damages under GC Sub-Clause 40.3, up to the limitation of liability specified in the PC, shall completely satisfy the Contractor's guarantees under GC Sub-Clause 40.1, and the Contractor shall have no further liability whatsoever to the Employer in respect thereof. Upon the payment of such liquidated damages by the Contractor, the Project Manager shall issue the Certificate of Completion for the Works or any part thereof in respect of which the liquidated damages have been so paid.

41. Defect

41.1 The Contractor warrants that the Works and Services or any part thereof shall be free from defects in the design, engineering,

Liability

materials and workmanship of the Works and Services executed.

41.2 The Defect Liability Period shall be twelve (12) months from the date of Completion of the Contract, or eighteen (18) months from the date of Certificate of Completion of the Works (or any part thereof), whichever occurs first, unless specified otherwise in the PC.

If during the Defect Liability Period any defect should be found in the design, engineering, materials and workmanship of the Works and Services executed by the Contractor, the Contractor shall promptly, in consultation and agreement with the Employer regarding appropriate remedying of the defects, and at its cost, repair, replace or otherwise make good (as the Contractor shall, at its discretion, determine) such defect as well as any damage to the Road caused by such defect. The Contractor shall not be responsible for the repair, replacement or making good of any defect or of any damage to the Road arising out of or resulting from improper operation or maintenance of the Road by the Employer after taking over.

- 41.3 The Contractor's obligations under this GC Clause 41 shall not apply to
 - (a) any works or materials that have a normal life shorter than the Defect Liability Period stated herein;
 - (b) any designs, specifications or other data designed, supplied or specified by or on behalf of the Employer or any matters for which the Contractor has disclaimed responsibility herein;
 - (c) any other materials supplied or any other work executed by or on behalf of the Employer, except for the work executed by the Employer under GC Sub-Clause 41.6.
- 41.4 The Employer shall give the Contractor a notice stating the nature of any such defect together with all available evidence thereof, promptly following the discovery thereof. The Employer shall afford all reasonable opportunity for the Contractor to inspect any such defect.
- 41.5 The Employer shall afford the Contractor all necessary access to the Site to enable the Contractor to perform its obligations under this GC Clause 41. The Contractor may remove from the Site any Plant and Equipment that are defective if the nature of the defect is such that repairs cannot be expeditiously carried out at the Site.
- 41.6 If the Contractor fails to commence the work necessary to remedy

such defect or any damage to the Road caused by such defect within a reasonable time (which shall in no event be considered to be less than fifteen (15) days), the Employer may, following notice to the Contractor, proceed to do such work, and the reasonable costs incurred by the Employer in connection therewith shall be paid to the Employer by the Contractor or may be deducted by the Employer from any monies due the Contractor or claimed under the Performance Security.

- 41.7 If the Road or any part thereof cannot be used by reason of such defect and/or making good of such defect, the Defect Liability Period of the Road or such part, as the case may be, shall be extended by a period equal to the period during which the Road or such part cannot be used because of any of the aforesaid reasons.
- 41.8 Except as provided in GC Clauses 40 and 41, the Contractor shall be under no liability whatsoever and howsoever arising, and whether under the Contract or at law, in respect of defects in the Road or any part thereof, the Plant and Equipment, design or engineering or work executed that appear after Completion of the Works and Services, except where such defects are the result of the gross negligence, fraud, criminal or willful action of the Contractor.

42. Limitation of Liability

- 42.1 Except in cases of criminal negligence or willful misconduct,
 - (a) the Contractor shall not be liable to the Employer, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Contractor to pay liquidated damages to the Employer and
 - (b) the aggregate liability of the Contractor to the Employer, whether under the Contract, in tort or otherwise, shall not exceed the limit specified in the PC.
- 43. Liability for Damages through Traffic Accidents and Traffic Interruptions
- 43.1 The Contractor cannot be held liable for losses or damages of any kind arising out of traffic accidents on the roads included in the Contract, unless those traffic accidents have been caused directly by potholes or other major defects of the Road covered by the Contract he failed to repair in a timely manner, criminal acts, wilful misconduct or gross negligence of the Contractor.
- 43.2 Under no circumstances can the Contractor be held liable for losses or damages of any kind and to anyone arising out of interruptions of traffic or traffic delays on the road included in the Contract, including any indirect or consequential loss or damage, loss of use,

loss of production, or loss of profits or interest costs.

F. PAYMENT

44. Contract Price

- 44.1 The Contract Price shall be as specified in the Form of Contract Agreement to be paid in the currencies indicated in the PC.
- 44.2 Unless indicated otherwise in the PC, and except in the event of a Change as provided for in the Contract, the Contract Price shall be:
 - (a) For Rehabilitation Works, a firm lump sum not subject to any alteration, to be paid according to work progress;
 - (b) For Maintenance Services, a firm lump sum to be paid in monthly installments;
 - (c) For Improvement Works, the total price stated in the Bill of Quantities for this item;
 - (d) For Emergency Works, the Provisional Sum reserved for this purpose.
- 44.3 The Contractor shall be deemed to have satisfied itself as to the correctness and sufficiency of the Contract Price, which shall, except as otherwise provided for in the Contract, cover all its obligations under the Contract.

45. Advance Payment

- 45.1 The Employer shall make advance payment to the Contractor of the amounts and by the date stated in the PC, against provision by the Contractor of an Unconditional Bank Guarantee in a form and by a bank acceptable to the Employer in amounts and currencies equal to the advance payment. The Guarantee shall remain effective until the advance payment has been repaid, but the amount of the Guarantee shall be progressively reduced by the amounts repaid by the Contractor. Interest will not be charged on the advance payment.
- 45.2 The Contractor is to use the advance payment only to pay for Equipment, Plant, Materials, and mobilization expenses required specifically for the execution of the Contract. The Contractor shall demonstrate that advance payment has been used in this way by supplying copies of invoices or other documents to the Project Manager.
- 45.3 The advance payment shall be repaid by deducting proportionate amounts from payments otherwise due to the Contractor, following the schedule of completed percentages of the Works and Services on a payment basis as indicated in the PC.

46. Bill of **Quantities**

- 46.1 The Bill of Quantities shall contain items for Groups of Activities which include the provision of Services (measured by performance standards) and Works (measured by unit of outputs or of products). The Bill of Quantities for Works shall include, where applicable, the lump-sum and unit price for Rehabilitation Works, and unit rates for Improvement Works and for Emergency Works.
- 46.2 Maintenance Services shall be measured and billed separately and will be remunerated by lump-sum amount for the period of the contract, and paid in fixed monthly payments during the entire Contract period. The values for remuneration of the Maintenance Services are those stated in the Bill of Quantities.
- 46.3 Rehabilitation Works will be remunerated by Lump-Sum amount for the period of the contract, however, indicating the quantities of measurable outputs to be executed in order that the Road achieves the performance standards specified in the bidding documents. Payments will be made in accordance with the execution of those measured outputs paid by executed works output. The prices shall be those stated in the Bill of Quantities.
- 46.4 Improvement Works will be remunerated after acceptance by the Employer and shall be paid according to the product unit price using the prices included in the Bill of Quantities.
- 46.5 Each Emergency Work Order issued by the Project Manager will include a lump-sum price for the works to be performed. The Lump-Sum price for the Emergency Works will be submitted by the Contractor to the Project Manager in each emergency pursuant to GC Clauses 29 and 61 and will be prepared based on the Specifications and on the unit prices included in the Bill of Quantities for Emergency Works, and will remunerate all Emergency Activities. The prices include compliance with all Performance Indices described in the Specifications. Once approved, Emergency Works will be paid as lump sum in accordance with the schedule of payment proposed by the Contractor for the specific Emergency and approved by the Employer.
- 46.6 The Bill of Quantities is used to calculate the Contract Price. The amounts for Maintenance Services and Rehabilitation Works are the Lump-Sum prices offered in the Contractor's Bid. The Improvement Works amount included in the Contract is an estimate on the basis of the unit prices included in the Contractor's Bid. The Provisional Sum included in the Contract Price is an estimate for use when authorized by the Employer for Emergency Works and

contingencies.

- **47. Measurement** 47.1 Maintenance Services will not be measured in volume; however its payment will be affected by compliance with the Performance Standards pursuant to GC Clause 24. Maintenance Services shall be billed in fixed monthly amounts as per the Bill of Quantities Lump-Sum amount for Maintenance Services, beginning from the Start Date. Payments will be made with Reductions if the Performance Standards are not achieved, as defined in the Specifications. The Reductions for non-compliance with the Performance Standards will be applied on a daily basis for the period under which the Road does not achieve the Performance Standards, in accordance with the methodology specified in the Specifications.
 - 47.2 Rehabilitation Works will be measured on the basis indicated in the PC, based on the quanity of actual work outputs as defined in the Specifications, concluded by the Contractor and approved by the Project Manager. The prices shall be those stated in the Bill of Quantities.
 - 47.3 Improvement Works will be measured on the basis indicated in the PC and in accordance with the unit of measurement used for product unit price included in the Bill of Quantities. The prices shall be those stated in the Bill of Quantities.
 - 47.4 Emergency Works will not be measured and shall be billed in accordance with the Schedule of Payments agreed for each specific Emergency Work as approved by the Employer.

48. Price Adjustments

48.1 Prices shall be adjusted for fluctuations in the cost of inputs only if provided for in the PC. If so provided, the amounts certified in each payment certificate, after deducting for Advance Payment, shall be adjusted by applying the respective price adjustment factor to the payment amounts due in each currency. A separate formula of the type indicated below applies to each Contract currency:

$$P_c = A_c + B_c Imc/Ioc$$

where:

P_c is the adjustment factor for the portion of the Contract Price payable in a specific currency "c"

- A_c and B_c are coefficients⁷ specified in the PC, representing the nonadjustable and adjustable portions, respectively, of the Contract Price payable in that specific currency "c", and
- Imc is the index prevailing at the end of the month being invoiced and Ioc is the index prevailing twenty-eight (28) days before Bid opening for inputs payable; both in the specific currency "c".
- 48.2 If the value of the index is changed after it has been used in a calculation, the calculation shall be corrected and an adjustment made in the next payment certificate. The index value shall be deemed to take account of all changes in cost due to fluctuations in costs.

49. Monthly Statements and Payments

- 49.1 The Contractor shall submit to the Project Manager monthly statements in the format indicated in the Specifications, of the estimated value of Maintenance Services, Rehabilitation Works, Improvement Works, and Emergency Works in separated items covering the Works and Services for the corresponding month.
- 49.2 The Project Manager shall check the Contractor's monthly statement and certify within fourteen (14) days the amount to be paid to the Contractor.
- 49.3 The value of Services executed shall be certified by the Project Manager taking into account the monthly amount included in the Bill of Quantities for Maintenance Services and the achievement of the Performance Standards for the Maintenance Services adjusted for any payment reductions in accordance with GC Sub-Clause 47.1.
- 49.4 The value of Works executed shall be certified by the Project Manager taking into account the value of the quantities of products executed and the prices in the Bill of Quantities.
- 49.5 The Project Manager may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.

50. Payments

50.1 Payments shall be adjusted for deductions for advance payments, retention, and reductions for not achieving Performance Standards for Maintenance Services. The Employer shall pay the Contractor

The sum of the two coefficients A_c and B_c should be 1 (one) in the formula for each currency. Normally, both coefficients will be the same in the formulae for all currencies, since coefficient A, for the nonadjustable portion of the payments, is a very approximate figure (usually 0.15) to take account of fixed cost elements or other nonadjustable components. The sum of the adjustments for each currency is added to the Contract Price.

the amounts certified by the Project Manager in accordance with GC Clause 49, within twenty-eight (28) days of the date of each certificate. If the Employer makes a late payment, the Contractor shall be paid interest on the late payment in the next payment. Interest shall be calculated from the date by which the payment should have been made up to the date when the late payment is made at the prevailing rate of interest for commercial borrowing for each of the currencies in which payments are made.

- 50.2 If an amount certified is increased in a later certificate or as a result of an award by the Adjudicator or an Arbitrator, the Contractor shall be paid interest upon the delayed payment as set out in this clause. Interest shall be calculated from the date upon which the increased amount would have been certified in the absence of dispute. The interest rate shall be determined as per Sub-Clause 50.1.
- 50.3 Unless otherwise stated, all payments and deductions will be paid or charged in the proportions of currencies comprising the Contract Price.
- 50.4 Items of the Works for which no rate or price has been entered in the Bill of Quantities will not be paid for by the Employer and shall be deemed covered by other rates and prices in the Contract.

51. Retention and Reductions

- 51.1 The Employer shall retain the percentage indicated in the PC from each payment due to the Contractor for Rehabilitation Works and Improvement Works, except for the types of works specified in the PC. The regular monthly lump-sum payments for performance-based Maintenance Services will not be subject to retentions, unless indicated in the PC.
- 51.2 On completion of the Rehabilitation and Improvement Works, half the total amount retained shall be repaid to the Contractor and the other half after twelve (12) months have passed and the Project Manager has certified that all Defects notified by the Project Manager to the Contractor have been corrected before the end of this period.
- 51.3 On completion of the whole Works and Services, the Contractor may substitute retention money with an "on demand" Bank guarantee.
- 51.4 Reduction of monthly payments for Maintenance Services due to non compliance with the Service Levels will be made as indicated in GC Sub-Clause 47.1. The amount of Reduction for the days in which the Road was not complying with the Performance Standards will not be paid or repaid, even after the Contractor re-establishes

the quality levels to the standards required by the contract.

52. Taxes and Duties

- 52.1 Except as otherwise specifically provided in the Contract, the Contractor shall bear and pay all taxes, duties, levies and charges assessed on the Contractor, its Subcontractors or their employees by all municipal, state or national government authorities in connection with the Works and Services in and outside of the country where the Site is located.
- 52.2 If any tax exemptions, reductions, allowances or privileges may be available to the Contractor in the country where the Site is located, the Employer shall use its best endeavors to enable the Contractor to benefit from any such tax savings to the maximum allowable extent.
- 52.3 For the purpose of the Contract, it is agreed that the Contract Price specified in the Form of Contract Agreement is based on the taxes, duties, levies and charges prevailing at the date twenty-eight (28) days prior to the date of bid submission in the country where the Site is located (hereinafter called "Tax"). If any rates of Tax are increased or decreased, a new Tax is introduced, an existing Tax is abolished, or any change in interpretation or application of any Tax occurs in the course of the performance of the Contract, which was or will be assessed on the Contractor, Subcontractors or their employees in connection with performance of the Contract, an equitable adjustment of the Contract Price shall be made to fully take into account any such change by addition to the Contract Price or deduction therefrom, as the case may be, in accordance with GC Clause 37 hereof.

53. Securities

53.1 Issuance of Securities

The Contractor shall provide the securities specified below in favor of the Employer at the times, and in the amount, manner and form specified below.

53.2 Advance Payment Security

- 53.2.1The Contractor shall, within twenty-eight (28) days of the notification of contract award, provide a security in an amount equal to the advance payment calculated in accordance with the corresponding PC to the Contract Agreement, and in the same currency or currencies.
- 53.2.2The security shall be in the form provided in the bidding documents or in another form acceptable to the Employer. The amount of the security shall be reduced in proportion to the value of the Works and Services executed by and paid to

the Contractor from time to time, and shall automatically become null and void when the full amount of the advance payment has been recovered by the Employer. The security shall be returned to the Contractor immediately after its expiration.

53.3 Performance Security

- 53.3.1The Contractor shall, within twenty-eight (28) days of the notification of contract award, provide a security for the due performance of the Contract in the amount specified in the PC.
- 53.3.2 The security shall be denominated in the currency or currencies of the Contract, or in a freely convertible currency acceptable to the Employer, and shall be in one of the forms of guarantees provided in the bidding documents, as stipulated by the Employer in the PC, or in another form acceptable to the Employer.
- 53.3.3The security shall automatically become null and void, twelve (12) months after Completion of all Works and Services under the Contract, provided however, that if the Defects Liability Period has been extended on any part of the Works pursuant to GC Sub-Clause 41.8 hereof, the Contractor shall issue an additional security in an amount proportionate to the Contract Price of that part. The security shall be returned to the Contractor immediately after its expiration.

54. Certificate of Completion

54.1 The Contractor shall request the Project Manager to issue a Certificate of Completion of the Rehabilitation Works, Improvement Works and Emergency Works, or parts thereof, as applicable, and the Project Manager will do so upon deciding that the work is completed.

55. Final Statement

55.1 The Contractor shall supply the Project Manager with a detailed account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period. The Project Manager shall issue a Defects Liability Certificate and certify any final payment that is due to the Contractor within fifty-six (56) days of receiving the Contractor's account if it is correct and complete. If it is not, the Project Manager shall issue within fifty-six (56) days a schedule that states the scope of the corrections or additions that are necessary. If the Final Account is still unsatisfactory after it has been resubmitted, the Project Manager shall decide on the amount payable to the Contractor and issue a

payment certificate.

56. Discharge

56.1 Upon submission of the Final Statement, the Contractor shall give to the Project Manager, a written discharge confirming that the total of the Final Statement represents full and final settlement of all monies due to the Contractor arising out of or in respect of the Contract. Provided that such discharge shall become effective only after payment due under the Final Payment Certificate issued pursuant to Sub-Clause 55 has been made and the performance security referred to in Sub-Clause 53.3, if any, has been returned to the Contractor.

57. As Built Drawings and Manuals

- 57.1 If "as built" Drawings and/or manuals are required, the Contractor shall supply them by the dates stated in the PC.
- 57.2 If the Contractor does not supply the Drawings and/or manuals by the dates stated in the PC, or they do not receive the Project Manager's approval, the Project Manager shall withhold the amount stated in the PC from payments due to the Contractor.

G. REMEDIES

58. Suspension

58.1 The Employer may request the Project Manager, by notice to the Contractor, to order the Contractor to suspend performance of any or all of its obligations under the Contract. Such notice shall specify the obligation of which performance is to be suspended, the effective date of the suspension and the reasons therefore. The Contractor shall thereupon suspend performance of such obligation (except those obligations necessary for the care or preservation of the Site and Works) until ordered in writing to resume such performance by the Project Manager.

If, by virtue of a suspension order given by the Project Manager, other than by reason of the Contractor's default or breach of the Contract, the Contractor's performance of any of its obligations is suspended for an aggregate period of more than ninety (90) days, then at any time thereafter and provided that at that time such performance is still suspended, the Contractor may give a notice to the Project Manager requiring that the Employer shall, within twenty-eight (28) days of receipt of the notice, order the resumption of such performance or request and subsequently order a change in accordance with GC Sub-Clause 63.1, excluding the performance of the suspended obligations from the Contract.

If the Employer fails to do so within such period, the Contractor may, by a further notice to the Project Manager, elect to treat the suspension as termination of the Contract under GC Sub-Clause 59.1.

58.2 If

- the Employer has failed to pay the Contractor any sum due (a) under the Contract within the specified period, has failed to approve any invoice or supporting documents without just cause pursuant to the Contract, or commits a substantial breach of the Contract, the Contractor may give a notice to the Employer that requires payment of such sum, with interest thereon as stipulated in GC Sub-Clause 50.1, requires approval of such invoice or supporting documents, or specifies the breach and requires the Employer to remedy the same, as the case may be. If the Employer fails to pay such sum together with such interest, fails to approve such invoice or supporting documents or give its reasons for withholding such approval, or fails to remedy the breach or take steps to remedy the breach within fourteen (14) days after receipt of the Contractor's notice: or
- (b) the Contractor is unable to carry out any of its obligations under the Contract for any reason attributable to the Employer, including but not limited to the Employer's failure to provide possession of or access to the Site, or failure to obtain any governmental permit under the Employer's responsibility and necessary for the execution and/or completion of the Works and Services,

then the Contractor may by fourteen (14) days' notice to the Employer suspend performance of all or any of its obligations under the Contract, or reduce the rate of progress.

- 58.3 If the Contractor's performance of its obligations is suspended or the rate of progress is reduced pursuant to this GC Clause 58, then the Time for Completion shall be extended in accordance with GC Sub-Clause 64, and any and all additional costs or expenses incurred by the Contractor as a result of such suspension or reduction shall be paid by the Employer to the Contractor in addition to the Contract Price, except in the case of suspension order or reduction in the rate of progress by reason of the Contractor's default or breach of the Contract.
- 58.4 During the period of suspension, the Contractor shall not remove from the Site any Plant and Equipment or any Contractor's Equipment, without the prior written consent of the Employer.

59. Termination 59.1 Termination for Employer's Convenience

59.1.1 The Employer may at any time terminate the Contract for any

- reason by giving the Contractor a notice of termination that refers to this GC Sub-Clause 59.1.
- 59.1.2 Upon receipt of the notice of termination under GC Sub-Clause 59.1.1, the Contractor shall either immediately or upon the date specified in the notice of termination
 - (a) cease all further work, except for such work as the Employer may specify in the notice of termination for the sole purpose of protecting that part of the Works and Services already executed, or any work required to leave the Site in a clean and safe condition,
 - (b) terminate all subcontracts, except those to be assigned to the Employer pursuant to paragraph (d) (ii) below,
 - (c) remove all Contractor's Equipment from the Site, repatriate the Contractor's and its Subcontractors' personnel from the Site, remove from the Site any wreckage, rubbish and debris of any kind, and leave the whole of the Site in a clean and safe condition.
 - (d) In addition, the Contractor, subject to the payment specified in GC Sub-Clause 59.1.3, shall
 - (i) deliver to the Employer the parts of the Works executed by the Contractor up to the date of termination.
 - (ii) to the extent legally possible, assign to the Employer all right, title and benefit of the Contractor to the Works and Services and to the Plant and Equipment as of the date of termination, and, as may be required by the Employer, in any subcontracts concluded between the Contractor and its Subcontractors
 - (iii) deliver to the Employer all non-proprietary drawings, specifications and other documents prepared by the Contractor or its Subcontractors as at the date of termination in connection with the Works.
- 59.1.3 In the event of termination of the Contract under GC Sub-Clause 59.1.1, the Employer shall pay to the Contractor the following amounts:
 - (a) the Contract Price, properly attributable to the parts of

- the works and services executed by the Contractor as of the date of termination,
- (b) the costs reasonably incurred by the Contractor in the removal of the Contractor's Equipment from the Site and in the repatriation of the Contractor's and its Subcontractors' personnel,
- (c) any amounts to be paid by the Contractor to its Subcontractors in connection with the termination of any subcontracts, including any cancellation charges,
- (d) the costs incurred by the Contractor in protecting and leaving the Site in a clean and safe condition pursuant to paragraph (a) of GC Sub-Clause 59.1.2,
- (e) the cost of satisfying all other obligations, commitments and claims that the Contractor may in good faith have undertaken with third parties in connection with the Contract and that are not covered by paragraphs (a) through (d) above.

59.2 Termination for Contractor's Default

- 59.2.1The Employer, without prejudice to any other rights or remedies it may possess, may terminate the Contract forthwith in the following circumstances by giving a notice of termination and its reasons therefor to the Contractor, referring to this GC Sub-Clause 59.2:
 - (a) if the Contractor becomes bankrupt or insolvent, has a receiving order issued against it, compounds with its creditors, or, if the Contractor is a corporation, a resolution is passed or order is made for its winding up (other than a voluntary liquidation for the purposes of amalgamation or reconstruction), a receiver is appointed over any part of its undertaking or assets, or if the Contractor takes or suffers any other analogous action in consequence of debt;
 - (b) if the Contractor assigns or transfers the Contract or any right or interest therein in violation of the provision of GC Clause 13:
 - (c) if the Contractor, in the judgment of the Employer has engaged in corrupt, fraudulent, collusive or coercive practices in competing for or in executing the Contract.

For the purpose of this Sub-Clause:

- (i) "corrupt practice" is the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;
- (ii) "fraudulent practice" is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;
- (iii) "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
- (iv) "coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
- (v) "obstructive practice" is
 - (aa) deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation, or

[&]quot;Another party" refers to a public official acting in relation to the procurement process or contract execution]. In this context, "public official" includes World Bank staff and employees of other organizations taking or reviewing procurement decisions.

A "party" refers to a public official; the terms "benefit" and "obligation" relate to the procurement process or contract execution; and the "act or omission" is intended to influence the procurement process or contract execution.

[&]quot;Parties" refers to participants in the procurement process (including public officials) attempting to establish bid prices at artificial, non competitive levels.

A "party" refers to a participant in the procurement process or contract execution.

(bb) acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under Sub-Clause 1.15 [Inspections and Audits by the Bank].

59.2.2 If the Contractor

- (a) has abandoned or repudiated the Contract
- (b) has without valid reason failed to commence work on the Road promptly or has suspended (other than pursuant to GC Sub-Clause 58.2) the progress of Contract performance for more than twenty-eight (28) days after receiving a written instruction from the Employer to proceed,
- (c) persistently fails to execute the Contract in accordance with the Contract, such failure being defined in the PC, or persistently neglects otherwise to carry out its obligations under the Contract without just cause,
- (d) refuses or is unable to provide sufficient materials, services or labor to execute and complete the Works and Services in the manner specified in the program furnished under GC Clause 17 at rates of progress that give reasonable assurance to the Employer that the Contractor can attain completion of the works and services by the Time for Completion as extended,

then the Employer may, without prejudice to any other rights it may possess under the Contract, give a notice to the Contractor stating the nature of the default and requiring the Contractor to remedy the same. If the Contractor fails to remedy or to take steps to remedy the same within fourteen (14) days of its receipt of such notice, then the Employer may terminate the Contract forthwith by giving a notice of termination to the Contractor that refers to this GC Sub-Clause 59.2.

- 59.2.3Upon receipt of the notice of termination under GC Sub-Clauses 59.2.1 or 59.2.2, the Contractor shall, either immediately or upon such date as is specified in the notice of termination.
 - (a) cease all further work, except for such work as the Employer may specify in the notice of termination for the sole purpose of protecting that part of the Works and Services already executed, or any work required to leave

the Site in a clean and safe condition

- (b) terminate all subcontracts, except those to be assigned to the Employer based on the Employer's written request,
- (c) deliver to the Employer all drawings, specifications and other documents prepared by the Contractor or its Subcontractors as of the date of termination in connection with the Works and Services.
- 59.2.4 The Contractor shall be entitled to be paid the Contract Price attributable to the Works and Services executed as of the date of termination, and the costs, if any, incurred in protecting and in leaving the Site in a clean and safe condition pursuant to paragraph (a) of GC Sub-Clause 59.2.3. Any sums due the Employer from the Contractor accruing prior to the date of termination shall be deducted from the amount to be paid to the Contractor under this Contract.

59.3 Termination by Contractor

59.3.1 If

- the Employer has failed to pay the Contractor any sum due under the Contract within the specified period, has failed to approve any invoice or supporting documents without just cause pursuant to GC Clause 50, or commits a substantial breach of the Contract, the Contractor may give a notice to the Employer that requires payment of such sum, with interest thereon as stipulated in GC Sub-Clause 50.2, requires approval of such invoice or supporting documents, or specifies the breach and requires the Employer to remedy the same, as the case may be. If the Employer fails to pay such sum together with such interest, fails to approve such invoice or supporting documents or give its reasons for withholding such approval, fails to remedy the breach or take steps to remedy the breach within fourteen (14) days after receipt of the Contractor's notice, or
- (b) the Contractor is unable to carry out any of its obligations under the Contract for any reason attributable to the Employer, including but not limited to the Employer's failure to provide possession of or access to the Site or other areas or failure to obtain any governmental permit under the Employer's responsibility and necessary for the execution and/or

completion of the Works and Services,

then the Contractor may give a notice to the Employer thereof, and if the Employer has failed to pay the outstanding sum, to approve the invoice or supporting documents, to give its reasons for withholding such approval, or to remedy the breach within twenty-eight (28) days of such notice, or if the Contractor is still unable to carry out any of its obligations under the Contract for any reason attributable to the Employer within twenty-eight (28) days of the said notice, the Contractor may by a further notice to the Employer referring to this GC Sub-Clause 59.3.1, forthwith terminate the Contract.

- 59.3.2 The Contractor may terminate the Contract forthwith by giving a notice to the Employer to that effect, referring to this GC Sub-Clause 59.3.2, if the Employer becomes bankrupt or insolvent, has a receiving order issued against it, compounds with its creditors, or, being a corporation, if a resolution is passed or order is made for its winding up (other than a voluntary liquidation for the purposes of amalgamation or reconstruction), a receiver is appointed over any part of its undertaking or assets, or if the Employer takes or suffers any other analogous action in consequence of debt.
- 59.3.3 If the Contract is terminated under GC Sub-Clauses 59.3.1 or 59.3.2, then the Contractor shall immediately
 - (a) cease all further work, except for such work as may be necessary for the purpose of protecting that part of the Road already executed, or any work required to leave the Site in a clean and safe condition,
 - (b) terminate all subcontracts, except those to be assigned to the Employer pursuant to paragraph (d) (ii),
 - (c) remove all Contractor's Equipment from the Site and repatriate the Contractor's and its Subcontractors' personnel from the Site.
 - (d) In addition, the Contractor, subject to the payment specified in GC Sub-Clause 59.3.4, shall
 - (i) deliver to the Employer the parts of the Road executed by the Contractor up to the date of termination.
 - (ii) to the extent legally possible, assign to the Employer all right, title and benefit of the

Contractor to the Road and to the Plant and Equipment as of the date of termination, and, as may be required by the Employer, in any subcontracts concluded between the Contractor and its Subcontractors,

- (iii) deliver to the Employer all drawings, specifications and other documents prepared by the Contractor or its Subcontractors as of the date of termination in connection with the Works and Services.
- 59.3.4 If the Contract is terminated under GC Sub-Clauses 59.3.1 or 59.3.2, the Employer shall pay to the Contractor all payments specified in GC Sub-Clause 59.1.3, and reasonable compensation for all loss, except for loss of profit, or damage sustained by the Contractor arising out of, in connection with or in consequence of such termination.
- 59.3.5 Termination by the Contractor pursuant to this GC Sub-Clause 59.3 is without prejudice to any other rights or remedies of the Contractor that may be exercised in lieu of or in addition to rights conferred by GC Sub-Clause 59.3.
- 59.4 In this GC Clause 59, in calculating any monies due from the Employer to the Contractor, account shall be taken of any sum previously paid by the Employer to the Contractor under the Contract, including any advance payment paid pursuant to the Contract.

H. Provisional Sum

60. Provisional Sum

- 60.1 "Provisional Sum" means a sum included in the Contract for use when authorized by the Employer for Emergency Works and for contingencies, which sum may be used, in whole or in part, or not at all, on the instructions of the Employer. The Contractor shall be entitled to only such amounts in respect of the work, supply or contingencies to which such Provisional Sums relate as the Project Manager shall determine in accordance with this Clause.
- 61. Use of
 Provisional
 Sum for
 Emergency
 Works
- 61.1 After detecting a situation which in the opinion of the Contractor justifies the execution of Emergency Works or otherwise as defined in GC Clause 29, the Contractor shall submit a Technical Report to the Project Manager characterizing the situation, and state estimated works quantities to correct the emergency situation, and a Lump Sum price quotation for the Emergency Works to be carried out. The price quotation should be based on the Specifications stated in

Section VII using the unit prices included in the Bill of Quantities.

- 61.2 If the execution of the Emergency Works require any activity not priced in the Bill of Quantities, the Contractor will use the price breakdowns included in the Contractor's Bid in order to form the unit prices of the unpriced items to be included in the Price Quotation of the Emergency Works, all in accordance with agreed methodology for approving new prices.
- 61.3 Upon receiving the request for Emergency Works including a Price Quotation, the Project Manager may issue a Work Order in accordance with GC Sub-Clause 29.2 for execution of the Emergency Works for a Lump-Sum amount with a payment Schedule agreed with the Contractor. The cost of these Works will be covered by the amounts included in the Provisional Sum.
- 62. Use of
 Provisional
 Sum for
 Contingencies
- 62.1 The use of the Provisional Sum to cover for Contingencies will be done under the control and initiative of the Project Manager in accordance with the conditions of the Contract.

I. CHANGE IN CONTRACT ELEMENTS

63. Change in Assignments to Contractor

- 63.1 Introducing a Change
 - 63.1.1 If so indicated in the PC, the Employer shall have the right to propose, and subsequently require, that the Project Manager order the Contractor from time to time during the performance of the Contract to make any change, modification, addition or deletion to, in or from the Assignments to the Contractor (hereinafter called "Change"), provided that such Change falls within the general scope of the Assignment and does not constitute unrelated work and that it is technically practicable, taking into account both the state of advancement of the Works and Services and the technical compatibility of the Change envisaged with the nature of the Works and Services as specified in the Contract.
 - 63.1.2 If so indicated in the PC, the Contractor may from time to time during its performance of the Contract propose to the Employer (with a copy to the Project Manager) any Change that the Contractor considers necessary or desirable to improve the quality, efficiency or safety of the Works and Services. The Employer may at its discretion approve or reject

- any Change proposed by the Contractor.
- 63.1.3Notwithstanding GC Sub-Clauses 63.1.1 and 63.1.2, no change made necessary because of any default of the Contractor in the performance of its obligations under the Contract shall be deemed to be a Change, and such change shall not result in any adjustment of the Contract Price or the Time for Completion.
- 63.1.4The procedure on how to proceed with and execute Changes is specified in GC Sub-Clauses 63.2 and 63.3, further details and sample forms are provided in the Sample Forms and Procedures section in the bidding documents.
- 63.2 Changes Originating from Employer
 - 63.2.1If the Employer proposes a Change pursuant to GC Sub-Clause 63.1.1, it shall send to the Contractor a "Request for Change Proposal," requiring the Contractor to prepare and furnish to the Project Manager, as soon as reasonably practicable, a "Change Proposal," which shall include the following:
 - (a) brief description of the Change
 - (b) effect on the Time for Completion
 - (c) estimated cost of the Change
 - (d) effect on Functional Guarantees (if any)
 - (e) effect on any other provisions of the Contract
 - 63.2.2Prior to preparing and submitting the "Change Proposal," the Contractor shall submit to the Project Manager an "Estimate for Change Proposal," which shall be an estimate of the cost of preparing and submitting the Change Proposal.
 - Upon receipt of the Contractor's Estimate for Change Proposal, the Employer shall do one of the following:
 - (a) accept the Contractor's estimate with instructions to the Contractor to proceed with the preparation of the Change Proposal,
 - (b) advise the Contractor of any part of its Estimate for Change Proposal that is unacceptable and request the Contractor to review its estimate,

- (c) advise the Contractor that the Employer does not intend to proceed with the Change.
- 63.2.3 Upon receipt of the Employer's instruction to proceed under GC Sub-Clause 63.2.2 (a), the Contractor shall, with proper expedition, proceed with the preparation of the Change Proposal, in accordance with GC Sub-Clause 63.2.1.
- 63.2.4 The pricing of any Change shall, as far as practicable, be calculated in accordance with the rates and prices included in the Contract. If such rates and prices are inequitable, the parties thereto shall agree on specific rates for the valuation of the Change.
- 63.2.5 If before or during the preparation of the Change Proposal it becomes apparent that the aggregate effect of compliance therewith, and with all other Change Orders that have already become binding upon the Contractor under this GC Clause 63, would be to increase or decrease the Contract Price as originally set forth in the Contract Agreement by more than fifteen percent (15%), the Contractor may give a written notice of objection thereto prior to furnishing the Change Proposal as aforesaid. If the Employer accepts the Contractor's objection, the Employer shall withdraw the proposed Change and shall notify the Contractor in writing thereof.

The Contractor's failure to so object shall neither affect its right to object to any subsequent requested Changes or Change Orders herein, nor affect its right to take into account, when making such subsequent objection, the percentage increase or decrease in the Contract Price that any Change not objected to by the Contractor represents.

63.2.6 Upon receipt of the Change Proposal, the Employer and the Contractor shall mutually agree upon all matters therein contained. Within fourteen (14) days after such agreement, the Employer shall, if it intends to proceed with the Change, issue the Contractor with a Change Order.

If the Employer is unable to reach a decision within fourteen (14) days, it shall notify the Contractor with details of when the Contractor can expect a decision.

If the Employer decides not to proceed with the Change for whatever reason, it shall, within the said period of fourteen (14) days, notify the Contractor accordingly. Under such circumstances, the Contractor shall be entitled to reimbursement of all costs reasonably incurred by it in the preparation of the Change Proposal, provided that these do not exceed the amount given by the Contractor in its Estimate for Change Proposal submitted in accordance with GC Sub-Clause 63.2.2.

63.2.7 If the Employer and the Contractor cannot reach agreement on the price for the Change, an equitable adjustment to the Time for Completion, or any other matters identified in the Change Proposal, the Employer may nevertheless instruct the Contractor to proceed with the Change by issue of a "Pending Agreement Change Order."

Upon receipt of a Pending Agreement Change Order, the Contractor shall immediately proceed with effecting the Changes covered by such Order. The parties shall thereafter attempt to reach agreement on the outstanding issues under the Change Proposal.

If the parties cannot reach agreement within sixty (60) days from the date of issue of the Pending Agreement Change Order, then the matter may be referred to the Adjudicator in accordance with the provisions of GC Sub-Clause 6.1.

- 63.3 Changes Originating from Contractor
 - 63.3.1If the Contractor proposes a Change pursuant to GC Sub-Clause 63.1.2, the Contractor shall submit to the Project Manager a written "Application for Change Proposal," giving reasons for the proposed Change and including the information specified in GC Sub-Clause 63.2.1.

Upon receipt of the Application for Change Proposal, the parties shall follow the procedures outlined in GC Sub-Clauses 63.2.6 and 63.2.7. However, should the Employer choose not to proceed, the Contractor shall not be entitled to recover the costs of preparing the Application for Change Proposal.

64. Extension Time for Completion

- 64.1 The Time(s) for Completion specified in the PC shall be extended if the Contractor is delayed or impeded in the performance of any of its obligations under the Contract by reason of any of the following:
 - (a) any Change in the Works and Services as provided in GC Clause 63.
 - (b) any occurrence of Force Majeure as provided in GC Clause 38

- and unforeseen conditions as provided in GC Clause 36,
- (c) any suspension order given by the Employer under GC Clause 58,
- (d) any changes in laws and regulations as provided in GC Clause 37, or
- (e) any default or breach of the Contract by the Employer, or any activity, act or omission of any other contractors employed by the Employer, or
- (f) any other matter specifically mentioned in the Contract
- by such period as shall be fair and reasonable in all the circumstances and as shall fairly reflect the delay or impediment sustained by the Contractor.
- 64.2 Except where otherwise specifically provided in the Contract, the Contractor shall submit to the Project Manager a notice of a claim for an extension of the Time for Completion, together with particulars of the event or circumstance justifying such extension as soon as reasonably practicable after the commencement of such event or circumstance. As soon as reasonably practicable after receipt of such notice and supporting particulars of the claim, the Employer and the Contractor shall agree upon the period of such extension. In the event that the Contractor does not accept the Employer's estimate of a fair and reasonable time extension, the Contractor shall be entitled to refer the matter to an Adjudicator, pursuant to GC Sub-Clause 6.1.
- 64.3 The Contractor shall at all times use its reasonable efforts to minimize any delay in the performance of its obligations under the Contract.

65. Release from Performance

65.1 If the Contract is frustrated by the outbreak of war or by any other event entirely outside the control of either the Employer or the Contractor, the Project Manager shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it and for any work carried out afterwards to which a commitment was made.

Section VIII. Particular Conditions (PC)

The following Particular Conditions shall supplement the GC. They are to be completed by the Employer and presented as part of the Bidding Documents. Whenever there is a conflict, the provisions herein shall prevail over those in the GC.

Reference to GC clauses

1.	The site is the error lineart description of site location l	
1.	The site is the area [insert description of site location]	
	The name of the Project Manager is lineart the name of the nargen appointed	
	The name of the Project Manager is [insert the name of the person appointed	
	by the Employer as Project Manager].	
3.	The following documents are also part of the Contract:	
	[list the documents, if any, which are not already mentioned in GC Clause 3.]	
4. The language of the Contract and the law governing the Contract		
	language]	
5.	The address of the Employer is: [insert exact street address, including	
	telephone and fax numbers, and E-Mail address]	
	The address of the Contractor is: [insert exact street address, including	
	telephone and fax numbers, and E-Mail address]	
6.	Dispute Resolution Method used: [insert either DRB or DRE]	
0.	Dispute Resolution Method used. [insert etiner DRB of DRE]	
6.1.2	The Appointing Authority is: [insert name]	
6.2.3	Arbitration Proceedings shall be conducted in accordance with the following	
	rules of procedure: [insert which set of rules is to be used]	
8.4.1	The Contractor is obliged to prepare and to furnish to the Project Manager for	
	Approval the following documents: [list documents]	
	Note: The documents to be furnished and needing approval by the Project	
	Manager will normally be related to Improvement Works and in some cases to	
	Rehabilitation Works.	

10.1	The Start Date shall be not later than [insert number] days after the issuance of the Letter of Acceptance by the Employer.
	[The recommended number of days is between 45 and 60, depending on local circumstances.]
10.2	The Time Schedule for the achievement of specific Service Levels is: [insert date or indicate in which section or annex of the Contract the Time Schedule is presented]
12.1	The Contractor is specifically allowed to subcontact the following activities: [list specific major activities or works required under the contract]
12.2	The Contractor may subcontract under his own responsibility and without prior approval of the Employer the following Works and Services provided they do not represent more than [insert number] percentage of the contract value: [list the generic description of Works and Services allowed to be subcontracted]
	Note: Under normal circumstances, the Contractor should be allowed to subcontract without prior approval of the Employer all the small works related to normal and recurrent maintenance services. However, the Contractor should normally not be allowed to subcontract the management and self-control activities.
14.2	The Employer shall give full possession of and access to the Site on [insert date here]
19.2 (h) and (i)	The provisions concerning HIV-AIDS prevention [insert "apply" or "do not apply"]. Note: The provisons should normally apply, except for very small contracts and/or under otherwise particular conditions.
21.	The Contractor shall carry out the following Rehabilitation Works, which are detailed in the Specifications: [insert listing of Rehabilitation Works]
22.	The Contractor shall carry out the following Improvement Works, which are detailed in the Specifications and Bill of Quantities: [insert listing of Improvement Works]
25.2	The Contractor shall establish a Self Control Unit [insert "not" after "shall" if this Unit is not required]
	[Note: The Self-control Unit should always be required, except for very small contracts.]

35.1	The Contractor shall take out and maintain in effect the following insurances in the sums and deductibles shown below: [insert list of insurances, including sums and deductibles of each insurance]
39.1	The Time for Completion are the following: [insert dates or periods for completion of specific activities required by the contract] Note: Besides the date for completion of the entire contract, there may be specific times for the completion of Improvement or Rehabilitation Works.
39.3	For Rehabilitation Works , the liquidated damages are <i>[insert percentage]</i> per calendar day of delay, of the payment normally due for the specific Works for which completion is delayed.
	For Improvement Works , the liquidated damages are <i>[insert percentage]</i> per calendar day of delay, of the payment normally due for the specific Works for which completion is delayed.
42.1	The aggregate liability of the Contractor to the Employer, excluding payment reductions defined in GC 47.1, shall not exceed the amount of [insert fixed amount, or percentage of contract amount]
44.1	The payment of the Contract Price will be made in the following currencies: [insert currencies and the percentage of each currency]
45.1	The amount of the Advance Payment is [insert amount or percentage of Contract Price as specified in the Form of Contract] The Advance payment will be made by [insert date or event]
45.3	The Advance payment will be repaid during the [insert number of payments] initial monthly payments at the rate of [insert percentage] percent of the amount advanced in each monthly payment until the repayment of the total amount.
47.2	Rehabilitation Works will be measured on the following basis: [indicate] Note: Rehabilitation Works should normally be measured on the basis of work outputs.
47.3	Improvement Works will be measured on the following basis: [indicate] Note: Depending on their nature, Improvement Works may be measured on the basis of work outputs or work inputs.

48.	Price adjustment [indicate if applies / does not apply]
	The coefficients are:
	$A_c =$
	$ m B_c =$
51.	The retention for Rehabilitation and Improvement Works is fixed at [indicate percentage] percent.
	The retention is not applicable to the following types of Rehabilitation and Improvement Works: [list types of works, if any, such as regravelling].
53.2.1	The amount of the Advance payment security is the same of the advance payment amount.
53.3.1	The amount of the Performance Security is [indicate amount, or percentage of Contract amount].
53.3.2	The form of guarantee is [indicate which of the options applies].
57.1	The following Drawings and/or Manuals are required at the following dates: [If applicable, specify type of document and date by which they are to be supplied. If not applicable, state "none".]
57.2	If the required documents are not supplied in accordance with PC 57.1, the amount to be withheld is [state amount].
59.2.2(c)	The condition of persistent failure to execute the contract is given if and when the total amount of payment reductions and liquidated damages applied under the contract reaches [insert number] percent of the total contract amount.
	[Depending on the type of roads and the structure of the contract, the recommended number could be in the order of $10-15$ percent of the total contract amount.]
63.1.1	The Employer has the right to propose a change in the contract: Yes or No [Indicate if applicable or not by deleting Yes or No as applicable].
63.1.2	Contractor's right to propose a change in the contract: Yes or No [Indicate if applicable or not by deleting Yes or No as applicable].

Section IX. Annex to the Particular Conditions - Contract Forms

Table of Forms

Notification of Award	162
Contract Agreement	163
Performance Security	165
Advance Payment Security	169
Retention Money Security	171

Notification of Award

LETTER OF ACCEPTANCE

[letterhead paper of the Employer]

[date]

To: [name and address of the Contractor]

This is to notify you that your Bid dated [date] for execution of the [name of the Contract and identification number, as given in the Contract Data] for the Accepted Contract Amount of the equivalent of [amount in numbers and words] [name of currency], as corrected and modified in accordance with the Instructions to Bidders, is hereby accepted by our Agency.

You are requested to furnish the Performance Security within 28 days in accordance with the Conditions of Contract, using for that purpose one of the Performance Security Forms included in Section IX, Annex to the Particular Conditions - Contract Forms, of the Bidding Document

Authorized Signature:	
Name and Title of Signatory:	
Name of Agency	

Attachment: Contract Agreement

Contract Agreement

THIS AGRE	EMENT made the, day of,,
between	of
	"the Employer"), of the one part, and of (hereinafter "the Contractor"), of the other part:
WHEREAS	the Employer desires that the Works and Services known as should be executed by the Contractor, and has
•	d by the Contractor for the execution and completion of these Works and the any defects therein,
The Employer	and the Contractor agree as follows:
	s Agreement words and expressions shall have the same meanings as are ssigned to them in the Contract documents referred to.
	ollowing documents shall be deemed to form and be read and construed as part ment. This Agreement shall prevail over all other Contract documents.
(i)	the Letter of Acceptance
(ii)	the Letter of Bid
(iii)	the addenda Nos(if any)
(iv)	the Particular Conditions
(v)	the General Conditions;
(vi)	the Specification
(vii)	the Drawings; and
(viii)	the completed Schedules,
2 T	

- 3. In consideration of the payments to be made by the Employer to the Contractor as indicated in this Agreement, the Contractor hereby covenants with the Employer to execute the Works and Servics, and to remedy defects therein in conformity in all respects with the provisions of the Contract.
- 4. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and Services, and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties her	eto have caused this Agreement to be executed in
accordance with the laws of	on the day, month and year
indicated above.	
Signed by	(for the Employer)
Signed by	(for the Contractor)

Performance Security

Option 1: (Demand Guarantee)

[Bank's Name, and Address of Issuing Branch	or Office]
Beneficiary: [Name and Address of Employer]	
Date:	
PERFORMANCE GUARANTEE No.:	
We have been informed that [name of Contractor] (hereinaf Contractor") has entered into Contract No [reference number dated with you, for the execution of [and brief description of Works and Services] (hereinafter called "the Contract").	of the contract]
Furthermore, we understand that, according to the conditions of the Contract, aguarantee is required.	a performance
At the request of the Contractor, we	the types and by us of your ontractor is in
This guarantee shall expire, no later than the Day of, 2 ² , and are payment under it must be received by us at this office on or before that date.	ny demand for

The Guarantor shall insert an amount representing the percentage of the Contract Price specified in the Contract and denominated either in the currency(cies) of the Contract or a freely convertible currency acceptable to the Employer.

Insert the date twenty-eight days after the expected completion date. The Employer should note that in the event of an extension of the time for completion of the Contract, the Employer would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Employer might consider adding the following text to the form, at the end of the penultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months][one year], in response to the Employer's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publica	ation No.
458, except that subparagraph (ii) of Sub-article 20(a) is hereby excluded.	

[signature(s)]

Note: All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.

Option 2: Performance Bond

By this Bond	as	Principal	(hereinafter	called	"the	Contractor")
and						_] as Surety
(hereinafter called "the Surety"), are he	eld	and firmly	bound unto]
as Obligee (hereinafter called "the Emp	ploy	ver") in the	e amount of			, for
the payment of which sum well and	tru	ly to be r	nade in the	types a	ınd pı	roportions of
currencies in which the Contract Price	ce i	is payable,	, the Contra	ctor and	d the	Surety bind
themselves, their heirs, executors, ac	dmi	nistrators,	successors	and ass	signs,	jointly and
severally, firmly by these presents.						
WHEREAS the Contractor has entered i	into	a written 2	Agreement w	ith the I	Emplo	yer dated the
day of		, 20,	for			in
accordance with the documents, plans, sextent herein provided for, are by referen	spe	cifications,	and amendr	nents the	ereto,	which to the
the Contract.		F				
NOW, THEREFORE, the Condition of	f th	is Obligati	on is such tl	nat, if th	ne Cor	ntractor shall

NOW, THEREFORE, the Condition of this Obligation is such that, if the Contractor shall promptly and faithfully perform the said Contract (including any amendments thereto), then this obligation shall be null and void; otherwise, it shall remain in full force and effect. Whenever the Contractor shall be, and declared by the Employer to be, in default under the Contract, the Employer having performed the Employer's obligations thereunder, the Surety may promptly remedy the default, or shall promptly:

- (1) complete the Contract in accordance with its terms and conditions; or
- (2) obtain a Bid or bids from qualified Bidders for submission to the Employer for completing the Contract in accordance with its terms and conditions, and upon determination by the Employer and the Surety of the lowest responsive Bidder, arrange for a Contract between such Bidder and Employer and make available as work progresses (even though there should be a default or a succession of defaults under the Contract or Contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the Balance of the Contract Price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term "Balance of the Contract Price," as used in this paragraph, shall mean the total amount payable by Employer to Contractor under the Contract, less the amount properly paid by Employer to Contractor; or
- (3) pay the Employer the amount required by Employer to complete the Contract in accordance with its terms and conditions up to a total not exceeding the amount of this Bond.

The Surety shall not be liable for a greater sum than the specified penalty of this Bond.

Any suit under this Bond must be instituted before the expiration of one year from the date of the issuing of the Taking-Over Certificate.

No right of action shall accrue on this Bond to or for the use of any person or corporation other than the Employer named herein or the heirs, executors, administrators, successors, and assigns of the Employer.

Surety has caused these pres	entractor has hereunto set his hand and sents to be sealed with his corporate stative, this day of	seal duly attested by the
	on behalf of	
	in the capacity of	
	on behalf of	
	in the capacity of	
In the presence of		

Advance Payment Security

Demand Guarantee

[]	Bank's Name, and Address of Issuing Branch or Office]
Beneficiary:[No	ame and Address of Employer]
Date:	
ADVANCE PAYMENT GUARANTEE	Z No.:
Contractor") has entered into Contract N	[name of Contractor] (hereinafter called "the No [reference number of the contract] ecution of [name of contract reinafter called "the Contract").
	ing to the conditions of the Contract, an advance to in figures [
undertake to pay you any sum or sums a [amount in figures] () [amount in statem writing accompanied by a written statem	[name of Bank] hereby irrevocably not exceeding in total an amount of in words] ¹ upon receipt by us of your first demand in nent stating that the Contractor is in breach of its Contractor used the advance payment for purposes pect of the Works.
· · · · · · · · · · · · · · · · · · ·	nt under this guarantee to be made that the advance n received by the Contractor on its account number me and address of Bank].
advance payment repaid by the Contract payment certificates which shall be preser upon our receipt of a copy of the interir	shall be progressively reduced by the amount of the for as indicated in copies of interim statements or need to us. This guarantee shall expire, at the latest, in payment certificate indicating that eighty (80) pertified for payment, or on the day of,

The Guarantor shall insert an amount representing the amount of the advance payment and denominated either in the currency(ies) of the advance payment as specified in the Contract, or in a freely convertible currency acceptable to the Employer.

	r. Consequently, any demand for payment under this guarantee is office on or before that date
This guarantee is subject to 458.	the Uniform Rules for Demand Guarantees, ICC Publication No.
 [signature(s)]	

Note: All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.

Insert the expected expiration date of the Time for Completion. The Employer should note that in the event of an extension of the time for completion of the Contract, the Employer would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Employer might consider adding the following text to the form, at the end of the penultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months][one year], in response to the Employer's written request for such extension, such request to be presented to the Guarantor before the expiry of the quarantee."

Retention Money Security

Demand Guarantee

	[Bank's Name, and Address of Issuing Branch or Office]
Beneficiary:	[Name and Address of Employer]
Date:	
RETENTION MONEY GUARA	NTEE No.:
Contractor") has entered into Condated with you, for	[name of Contractor] (hereinafter called "the ntract No [reference number of the contract] the execution of [name of contract res] (hereinafter called "the Contract").
Taking-Over Certificate has been Money has been certified for pay Money or if the amount guarantee Certificate is issued is less than h	, according to the conditions of the Contract, when the issued for the Works and the first half of the Retention ment, payment of <i>[insert</i> the second half of the Retention d under the Performance Guarantee when the Taking-Over half of the Retention Money, the difference between half of count guaranteed under the Performance Security] is to be murantee.
undertake to pay you any sum or [amount in figures] () [writing accompanied by a writter	we [name of Bank] hereby irrevocably sums not exceeding in total an amount of amount in words] ¹ upon receipt by us of your first demand in a statement stating that the Contractor is in breach of its the contractor used the advance payment for purposes in in respect of the Works.
of the second half of the Retention	payment under this guarantee to be made that the payment in Money referred to above must have been received by the at [name and address of

The Guarantor shall insert an amount representing the amount of the second half of the Retention Money or or if the amount guaranteed under the Performance Guarantee when the Taking-Over Certificate is issued is less than half of the Retention Money, the difference between half of the Retention Money and the amount guaranteed under the Performance Security and denominated either in the currency(ies) of the second half of the Retention Money as specified in the Contract, or in a freely convertible currency acceptable to the Employer.

This guarantee shall expire, at the latest, 21 days after the date when the Employer has received a copy of the Performance Certificate issued by the Engineer. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 458.

[signature(s)]

Note: All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.

Attachments: Forms of Invitation for Bid

74 Forms of Invitation for Bids

Form of Invitation for Bids¹²

(following Prequalification)
[letterhead paper of the Employer] 13

		[date]
To: [name of Contractor] [address]		
Reference: [Insert IBRD Loan No. or IDA Credit No.]		
Contract Name, and Identification No//	14	
Dear Sirs:		

We hereby inform you that you are prequalified for bidding for the above cited contract. A list of prequalified and conditionally prequalified Applicants is attached to this invitation.

On the basis of information submitted in your application, you would [not] (insert if appropriate) appear eligible for application of the domestic bidder price preference in bid evaluation. Eligibility is subject to confirmation at bid evaluation.

We now invite you and other prequalified Applicants to submit sealed bids for the execution and completion of the cited contract.

You may obtain further information from, and inspect and acquire the bidding documents at, our offices at [mailing address, street address, and cable/telex/facsimile numbers]. 15

A complete set of bidding documents may be purchased by you at the above office, on or after [time and date] and upon payment of a nonrefundable fee of [insert amount and currency]. 16

This sample "Form of Invitation for Bids" is a basic form that should be adapted appropriately by the Employer to cover the following points as required:

[•] the conditions, if any, for prequalification, stating explicitly the deficiencies that must be corrected to meet all the conditions and the time to fulfill them before bid submission;

[•] in slice and package bidding, the number of individual contracts (slices) or the specified ceiling amount in total value for which the Applicant is qualified; and

[•] the finalization of preliminary joint venture agreement and any modifications required.

The Borrower and the Employer may be the same or different entities. The text of the Invitation for Bids and the texts of the other documents herein must be footnoted to indicate which agency will act as the Employer.

The Employer should insert the name and identification number of a single contract, or for concurrent slice and package bidding, those of individual contracts (slices) within the package for which Applicants expressed a preference, and for which they are prequalified.

The office for inquiries and issue of bidding documents and the office for bid submission may or may not be the same. The place of bid opening may also differ and, if so, should be identified.

The chargeable fee should only be nominal, to cover reproduction and mailing costs. An amount of between US\$50 and US\$500 equivalent is considered appropriate, depending on the size and complexity of the works and the bidding documents.

Forms of Invitation for Bids 175

All bids must be accompanied by a security in the form and amount specified in the bidding documents, and must be delivered to [address and exact location] at or before [time and date]. Bids will be opened immediately thereafter in the presence of bidders' representatives who choose to attend.¹⁷

Please confirm receipt of this letter immediately in writing by cable, fax, or telex. If you do not intend to bid, we would appreciate being so notified also in writing at your earliest opportunity.

Yours truly,

Authorized signature	
Name and title	
Employer	

Coordinate this paragraph with Clause 25 of Section II, Instructions to Bidders, "Bid Opening." Also see footnote 4.

SPECIFIC PROCUREMENT NOTICE INVITATION FOR BIDS

(without Prequalification)

[NAME OF COUNTRY]

[NAME OF PROJECT]

[BRIEF DESCRIPTION OF WORKS]

Loan/Credit No.

Contract/Bid No.

This invitation for bids follows the general procurement notice for this project that appeared in *Development Business* No. [insert number] of [insert date]. 18

The [insert name of Borrower] [has received/has applied for/intends to apply for] a [loan/credit] from the [International Bank for Reconstruction and Development (IBRD)/International Development Association (IDA)] toward the cost of the [insert name of Project], and it intends to apply part of the proceeds of this [loan/credit] to payments under the contract for [insert name/no. of Contract]. ¹⁹ The [insert name of implementing agency] now invites sealed bids from eligible bidders for [insert description of works to be procured]. ²⁰ The delivery/construction period is [insert number of days/months/years or dates]. ²¹

Bidding will be conducted through the international competitive bidding procedures specified in the World Bank's *Guidelines: Procurement under IBRD Loans and IDA Credits*, May 2004), and is open to bidders from all countries as defined in the guidelines.²²

Interested eligible bidders may obtain further information from and inspect the bidding documents at the [insert name of agency] at the address below [state address at end of

Day, month, year; for example, 31 January 2004.

[[]Insert the following if applicable]. This Contract will be jointly financed by [insert name of cofinancing agency]. Bidding will be governed by the World Bank's eligibility rules and procedures.

A brief description of the type(s) of goods or Works should be provided, including quantities, location of Project, and other information necessary to enable potential bidders to decide whether or not to respond to the invitation. Bidding documents may require bidders to have specific experience or capabilities; such restrictions should also be included in this paragraph.

Insert this sentence if applicable.

Occasionally, contracts may be financed out of special funds that would further restrict eligibility to a particular group of member countries. When this is the case, it should be mentioned in this paragraph. Also indicate any margin of preference that may be granted as specified in the loan or credit agreement and set forth in the bidding documents.

Forms of Invitation for Bids 177

document] from [insert office hours]. ²³ A complete set of bidding documents in [insert name of language] may be purchased by interested bidders on the submission of a written application to the address below and upon payment of a nonrefundable fee²⁴ of [insert amount in local currency] or in [insert amount in specified convertible currency]. The method of payment will be [insert method of payment]. ²⁵ The document will be sent by [insert delivery procedure]. ²⁶

Bids must be delivered to the address below by [insert time and date]. All bids must be accompanied by a bid security of [insert amount in local currency or minimum percentage of bid price] or an equivalent amount in a freely convertible currency.²⁷ Late bids will be rejected. Bids will be opened in the presence of bidders' representatives and anyone who choose to attend at the address below²⁸ at [insert time and date].

[Insert name of office]
[Insert name of officer]
[Insert postal address and/or street address]

Tel: [Indicate country and city code]
Fax: [Indicate country and city code]
E-mail: [Indicate E-mail address]

²³ For example, 0900 to 1200 hours.

The fee, to defray printing and mailing/shipping costs, should be nominal.

²⁵ For example, cashier's check, direct deposit to specified account number, etc.

The delivery procedure is usually air mail for overseas delivery and surface mail or courier for local delivery. If urgency or security dictates, courier services may be required for overseas delivery.

The amount of bid security should be stated as a fixed amount or as a minimum percentage of the Bid Price. Alternatively, if a bid security is not required (often the case in supply contracts), the paragraph should so state.

The office for bid opening may not necessarily be the same as that for inspection or issuance of documents or for bid submission. If they differ, each address must appear at the end of the notice and be numbered; as, for example, (1), (2), (3). The text in the paragraph would then refer to address (1), (2), etc. Only one office and its address may be specified for submission, and it should be near the place where bids will be opened.

Annex to SAMPLE BIDDING DOCUMENT

Procurement of Output- and Performance-based Road Contracts (OPRC)

Sample Specifications for OPRC



The World Bank Washington, D.C.

October 2006

Notes for preparing Specifications for Output- and Performance-Based Road Contracts

Precise and clear Specifications are a prerequisite for bidders to respond realistically and competitively to the requirements of the Employer without qualifying or conditioning their bids. In the context of bidding documents for the Output- and **Performance-based Road Contracts**, the Specifications must cover different areas (performance criteria, general technical aspects, organization, environmental regulations, etc.) and must be drafted to permit the widest possible competition and, at the same time, present a clear statement of the required standards to be complied with. Specifications must be written specially by the Employer to suit the specific conditions of each country and of the roads included in the contract. Recognizing that there are no standard specifications for universal application in all countries, the Bank has prepared and provides below sample texts for (i) Output and Performance Specifications, to be applied for Management and Maintenance Services, and for Rehabilitation and Improvement works, and (ii) Specifications on Procedures for Emergency Works. The Bank suggests the use of these sample texts, which nevertheless still need adaptation to the specific conditions of the road networks under contract. The sample Specifications provided reflect the basic principles which have been adopted under this sample bidding document for Outputand Performance-Based Road Contracts, and they have been prepared to ensure that they correspond to the definitions and provisions of the Sample Bidding Document. They should also help to prevent conflicts which could derive from potential contradictions between the different parts of the bidding documents.

The completed "Section VI – Specifications" of the finalized bidding document should include as a minimum the following parts:

Part A: Output and Performance Specifications (see sample text starting on page 1)

This part includes a detailed description of (i) the concepts on which the Output- and Performance-Based Road Contracts is prepared; (ii) the Service Levels required on the roads included in the contract; (iii) the methods and procedures to be applied for

measuring compliance with Service Levels; (iv) the payment reductions and/or liquidated damages applied in case of non-compliance, (v) the initial rehabilitation works and the improvement works the contractor will have to carry out in addition to the general Management and Maintenance Services and Works, and (vi) other aspects, such as the internal organization of the contractor, etc. *This document provides sample text for this part.*

It is important that the performance criteria cover all aspects of the contract and take account of the fact that different roads within the contract area might require different service levels. In setting the measures various criteria (both technical and practical) need to be carefully considered, such as (i) traffic volume and composition, (ii) urban vs. rural roads (iii) flat, hilly or mountainous terrain, (iv) subgrade quality and type, (v) quality of available construction materials, (vi) capacity of available contractors, (vii) any environmental constraints, such as protected areas, parks, forest reserves, etc. However, probably the most important criterion is the question of what service level can be afforded and economically justified for the road in question.

The tables presented on the following two pages give an indication of the range of values that may be considered:

Typical Service Levels for Unpaved Roads

	Fair	Good	Very Good
Typical Traffic Volumes (Vehicles/day)	Less than 50	50 – 150	150 - plus
Average operational Traffic Speed (km/h)	40	60	70
Surface Degradation - Maximum diameter of any single degradation	45cm	35cm	25cm
Surface Degradation - Max Number greater than nominated diameter in any 100m	20/30cm	10/25cm	2/25cm
Cleanliness of pavement surface and shoulders response time for safety related matters	24 hrs	10 hrs	6 hours
Cleanliness of pavement surface and shoulders response time for all other matters	14 days	7 days	4 days
Road Corrugation Amplitude	4.5cm	3.5cm	2.5cm
Rut Depth	10.0 cm	7.0 cm	5.0 cm

Typical Service Levels for Paved Roads

	Fair	Good	Very Good	Excellent
Typical Traffic Volumes (Vehicles/day)	Less than 250	250 - 1000	1000 – 5000	5000 plus
Potholes (Max Dia of any single pothole)	40 cm	30cm	15cm	No potholes allowed
Potholes (Max number in any 1000m with diameter greater than 10 cm	12	8	4	None allowed
Patching (Response time)	28 days	28 days	14 days	7 days
Cracking (Response time)	28 days	28 days	28 days	28 days
Cleanliness of the pavement surface and shoulders for safety related matters (Response time)	10 hrs	8 hrs	6 hrs	3 hr
Cleanliness of pavement surface and shoulders response time for all other matters (Response time)	14 days	7 days	5 days	3 days

	Fair	Good	Very Good	Excellent
Typical Traffic Volumes (Vehicles/day)	Less than 250	250 - 1000	1000 – 5000	5000 plus
Rutting	4.0 cm	4.0 cm	3.0 cm	2.0 cm
Rutting (Response time)	56 days	56 days	28 days	28 days
Raveling (Response time)	56 days	56 days	28 days	28 days
Loose Pavement Edges (Response time)	56 days	56 days	28 days	28 days
Height of Shoulders vs. Height of pavement	7.5 cm	5.0 cm	5.0 cm	5.0 cm
Height of Shoulders vs. Height of pavement (Response time)	56 days	56 days	28 days	14 days
Paved Shoulders (Response time)	56 days	56 days	28 days	28 days

When using response times as part of the performance criteria, it is important to select them carefully as they have a significant influence on the cost of undertaking the work. Consideration needs to be given to the time needed to:

Identify the fault

Schedule the necessary work

Mobilizing the necessary resources

Undertaking the work

and to the available technology – very short response times often dictate the need for "real time" technology which may not be really necessary or appropriate in many instances.

Part B: General Specifications for Roadworks (no sample text provided in this document)

This part is very country-specific and should present the norms and specifications generally applied for road works in a specific country, mainly in terms of quality and workmanship. Part B is applicable mainly for specific Rehabilitation and Improvement Works described in Part A, but at least parts of it may also be applicable for Maintenance Services and Emergency Works. Note: *This document provides no sample text for this part.*

Care should be taken to not make unnecessary references to method-based specifications that unduly limit the contractor's ability to provide innovative solutions.

Part C: Specifications for Emergency Works (see sample text starting from page 55)

This part must describe the procedures and other rules to be applied if Emergency Works are to be carried out within the contract. Note: *This document provides sample text for this section*. Use of the sample text would help to ensure that the concept of Emergency Works is not misused.

Part D: Environmental and Social Specifications (no sample text provided in this document)

This part would provide a set of rules to be followed by the contractor in order to avoid unnecessary damage to the environment and/or social aspects on housing, sanitation, and health of labor. Note: *This document provides no sample text for this part.*

Other Specifications may be needed concerning the use of materials, plant and equipment by the contractor, if the provisions included in the General Conditions (GC, Section VII) and complemented in the Particular Conditions (PC, Section VIII) are deemed insufficient by the Employer. Also, these issues may already be covered in the General Specifications for Roadworks.

Only if the various parts of the Specifications are completed adequately and included in the bidding document, will the objectives of economy, efficiency and equality in procurement be realized, and the responsiveness of bids be ensured, and the subsequent task of bid evaluation facilitated.

It is nevertheless important to remember again that this sample bidding document should not be used for roads or road networks in poor condition which require a very substantial and costly upgrading and/or rehabilitation before they can be maintained. It is suggested that whenever the initial upgrading and/or rehabilitation or improvement works are estimated to cost more than 40 to 50 percent of the total

contract amount, it should be considered to undertake those works under a traditional contract model based on a bill of quantities and unit prices.

The use of metric units is encouraged by IBRD.

Care must be taken in drafting Specifications to ensure that they are not too restrictive. In the specification of standards for materials, plant, other supplies, and workmanship, recognized international standards should be used as much as possible.

These **Notes** for **Preparing Technical Specifications** are intended only as information for the Employer or the person drafting the bidding documents. They should **not** be included in the final bidding documents.

Proposed sample text for Section VI, Part A Output and Performance Specifications

Part A1	Basic concepts of Output- and Performance-based Road Contracts	188
Part A2	Description of Services to Be Provided	188
2.1	General Specifications (for unpaved and paved roads)	188
	2.1.1 Scope of Services to Be Provided	
	2.1.2 Description of the project area	188
	2.1.3 Description of the Roads Included in Contract	188
	2.1.4 Reference Information	
	2.1.5 Design Criteria for Rehabilitation and Improvement Works	189
	2.1.6 Rehabilitation Works to be carried out by Contractor	189
	2.1.7 Improvement Works to be carried out by Contractor	191
	2.1.8 Quality of Materials to be used	192
	2.1.9 Self-Control Unit of Contractor	192
	2.1.10 Communications Equipment	
	2.1.11 Site Regulations and Work Procedures	
	2.1.12 Functions of Key Personnel	193
	2.1.13 Specification of Service Quality Criteria	193
	2.1.14 Methods of Inspection of Service Levels	193
	2.1.14.1 Formal Inspections of Service Levels	
	2.1.14.2 Informal Inspections of Service Levels	194
2.2	Specification for the Provision of Management Information	194
	2.2.1 Longitudinal Profile (applicable for unpaved roads only)	
	2.2.2 Monthly Statement	195
	2.2.3 Program of Performance	199
	2.2.3.1 Contractor's Quality Assurance Plan	199
	2.2.3.2 Health and Safety Management Plans	199
	2.2.3.3 Emergency Procedures and Contingency Plan	
	2.2.3.4 Traffic Management Plan	
	2.2.4 Updating of Road Administration Databases	
	2.2.5 Handover Report	
2.3	Specification of Service Level Criteria for Unpaved Roads	202
	2.3.1 Road User Service and Comfort Measures for Unpaved Roads	
	2.3.1.1 Usability of the Road	
	2.3.1.2 Average Traffic Speed	
	2.3.1.3 Road User Comfort	
	2.3.2 Durability Measures for Unpaved Roads	
	2.3.3 Variations and Gradual Compliance with Service Levels	
	2.3.4 Means used for Inspection of Service Levels for Unpaved Roads	

	2.3.5	Methodologies to be used for Assessing Service Levels on	206
	2.3.6	Unpaved Roads Summary Table for Maximum and Threshold Values	
		•	
2.4	_	ication of Service Level Criteria for Paved Roads	
	2.4.1	Usability of the Road	
		Road User Service and Comfort Measures for Paved Roads	
		Durability measures for paved roads	
		I.2.1 Road Roughness	
		1.2.2 Road Deflection	
		Variations and gradual compliance with Service Levels	
	2.4.3	Means used for Assessing of Service Levels for Paved Roads	
	2.4.5	Methodologies and Procedures to Be Used for Measurement of	210
	2.4.3	Service Levels on Paved Roads	216
	~. ·		
2.5		ing and Road Safety	
	2.5.1	Service Levels Measures for Signaling and Road Safety	220
2.6	Draina	ge	221
	2.6.1	Service Levels	221
	2.6.2	r	
	2.6.3	Procedures for Inspection	222
2.7	Vegeta	ition	222
	2.7.1	Service Levels	
	2.7.2	Variations and Gradual Compliance with Service Levels	225
	2.7.3	Means used for Assessing Compliance with Service Levels	225
2.8	Structi	ıres	225
2.0	2.8.1	Service Levels	
	2.8.2	Variations and gradual compliance with Service Levels	
	2.8.3	Procedures for Inspection	
2.9	Clopas	•	
2.9	2.9.1	Cuts and Embankments Service Levels	
	2.9.1	Variations and gradual compliance with Service Levels	
	2.9.2	Procedures for Inspection	
2 1 2		•	
2.10		nt Reductions and Liquidated Damages	
		Determination of Payment Reductions	
	2.10.2	Determination of Liquidated Damages	232

PART A1. Basic Concepts of Output- and Performance-Based Road Contracts

[Note: The basic concept of Output- and Performance-based Road Contracts is presented in the Preface of the bidding document. It should simply be copied and inserted here, starting with the third paragraph of the Preface, and ending just before the last paragraph.]

PART A2. Description of Services to be Provided

2.1 General Specifications (for unpaved and paved roads)

2.1.1 Scope of Services to be provided

Notwithstanding the provisions of Clause 7 of the contract, the services to be provided by the Contractor include all activities, physical or others, which the Contractor needs to, carry out, in order to comply with the Service Levels and other output and performance criteria indicated under the contract, or with any other requirements of the contract. In particular, they include management tasks and physical works associated with the following road-related assets and items:

[Note: List the extent of specific road related assets and items that are to be maintained under the contract. The list may include:

- Pavements (paved roads)
- Road surface (unpaved roads)
- Signaling and road safety furniture
- Drainage structures
- Vegetation control
- *Slopes (cuts and embankments)*
- Structures
- Traffic Management
- Data Collection
- etc.1

2.1.2 Description of the project area

The project roads are in the[provide a brief overview of the region, including its economy, climate, geography, and the transportation network].

2.1.3 Description of the Roads included in Contract

The road sections included in the contract are the following: [provide detailed listing of roads and/or road sections included in the contract, with precise description of the beginning and end of each section].

2.1.4 Reference Information

As a general reference, the information shown below is provided to the Bidder. The Employer provides this information to the best of his knowledge, but does not guarantee its correctness, and the Contractor may not make any claim based on potential errors or omissions in the information provided.

[Provide information which may be useful to the bidder for the preparation of his bid, such as

- Traffic volumes for each road section
- Traffic composition
- Rainfall quantities and patterns
- Technical information of each road, such as original design, previous works executed, etc.
- Any maintenance history that is available
- Other information as available.]

2.1.5 Design Criteria for Rehabilitation and Improvement Works

All Rehabilitation Works and Improvement Works shall be designed to meet the following minimum design criteria:

[insert here the **minimum design criteria** to be used in the design of any rehabilitation and/or improvement works that may be required during the term of the contract. It is important to ensure that the works have the appropriate residual life at the end of the contract period. Criteria should be included for

- Pavements (for paved roads)
- Road surfacing (for unpaved roads)
- Structures
- Drainage structures (including the design period of the storm event culverts are to pass without overtopping)
- Signage]

2.1.6 Rehabilitation Works to be carried out by Contractor

[Note: It is recommended to keep any mandatory explicit rehabilitation works to a minimum. Any detailed specification of substantial physical rehabilitation works at precise locations, based on a detailed design provided by the employer, would be contrary to the underlying concept of a lump-sum price included in this contract. If the Employer intends to do so, the document should be modified and prices should be asked for a unit price "inputs" based on a bill of quantities similar to the one used for Emergency Works.

However, it may well be appropriate to mandate minimum quantities of work to be undertaken throughout the contract and include them within the lump sum. For example:

For unpaved roads, it may be useful to make mandatory certain minimum physical quantities, such as, for example, a certain number of cubic meters of gravel or other materials to be added to the road during the contract period, without necessarily specifying the exact locations of where the materials are to be added. The quantity could be based on a technical study, or on qualified estimates made by the technical staff of the Employer.

For paved roads, it could be mandated that the Contractor applies a certain minimum quantity (in cubic meters or metric tons) of asphalt concrete to the roads during the contract period. Alternatively the minimum length of pavement rehabilitation or strengthening required in each year during the contract could be specified and the contractor left to define of the most appropriate location for each year's program for pavement rehabilitation and strengthening. The minimum quantities could be defined based on a technical study, or on qualified estimates made by the technical staff of the Employer.

<u>For culverts and other structures</u> there could be an obligation to build, for example, a certain number of culverts of a certain capacity, or the construction of a certain number of linear meters of retaining walls.

The main purpose of making this type of works mandatory is to ensure that an appropriate level of rehabilitation work is carried out during the contract and to avoid a gross miscalculation by any of the bidders as to the quantity of works necessary. The definition of mandatory minimum rehabilitation works thus reduces the risk that a bidder wins the contract based on a very low bid, but is then unable to comply. They also ensure that the contractor does not just rely on routine maintenance activities to meet the service levels in the last year or two of the contract period and so create a new backlog of rehabilitation work.

There are two possible options for the design of rehabilitation works. One is for the Employer to provide the detailed design to the Contractor and the second is for the Contractor to undertake the design to the Employer's design criteria and satisfaction. The second option is preferred as it allows the contractor to introduce more innovation.]

2.1.6.1 Description of the Rehabilitation Works

The Contractor will have to carry out the following minimum quantity of Rehabilitation Works:

[Present a list showing quantities and types of works, including drawings and technical documents (if applicable) provided by the Employer and the time frame for the execution of the Rehabilitation Works. Items on the list may include light reshaping and gravelling, heavy reshaping and gravelling, embankment works, asphalt overlays, culvert repairs and culvert extensions, installation of new culverts, repairs to wooden bridge decks, drift construction, road sign installation, etc.]

The Contractor is to make an independent estimate of the rehabilitation works which in his view are necessary to bring the roads to the required service levels, and include the cost for those works either in the item for Initial Rehabilitation Works (up to the ceiling given by the Employer in the Bidding Data) or in the price for Maintenance Services. However, only those works defined under the item for Rehabilitation Works will be paid for specifically and separately under the contract. Other works needed to bring roads up to the required service levels, but which are not included in the item for Rehabilitation Works, shall be included by the bidders in the lump sum price for Maintenance Services. Contractors are solely responsible for estimating the type and quantity of Rehabilitation Works needed to meet the requirements of the contract. During the execution of the contract the Contractor shall not be entitled to make claims for any Rehabilitation Works not foreseen at the time of bid preparation or not included in the bidding document.

The time for completion of the Rehabilitation Works varies from road to road in relation to the schedule for compliance with service level criteria as shown in the compliance timetables in [insert clause number e.g.2.3.3 for unpaved roads].

The Rehabilitation Works indicated above may not be interpreted as to be sufficient in order to assure compliance with any of the Service Levels required by the contract.

2.1.6.2 List of Documents Related to Rehabilitation Works for Approval or Review

The following documents are specified in accordance with sub-clause 8.4.1 of the GC:

[insert here a list of documents related to Rehabilitation Works to be provided by the Contractor, such as linear diagrams, as-built drawings, etc. Indicate which of the documents listed need approval and who is to provide such approval.]

2.1.6.3 Payment for Rehabilitation Works

The Rehabilitation Works indicated above will be priced through a separate lump-sum amount included in the Contract Price. The Contractor will invoice Rehabilitation Works in Monthly Statements and in accordance with the Rehabilitation Works actually carried out and measured by Product Unit Price as stated in the Bill of Quantities. [Note: Product Unit Prices are different from the input unit prices typically used in Works contracts. They are the prices for completed products, such as a culvert of a certain type, the re-establishment of a certain shoulder width per one-km section of road, etc.]

2.1.7 Improvement Works to be carried out by Contractor

[Note: It is recommended to keep Improvement Works to a minimum. It is important that the focus of the contract is Management and Maintenance of the roads and not the construction of new works.]

2.1.7.1 Description of Improvement Works

The contractor will have to carry out the following Improvement Works:

[Indicate quantities and type of works, and the time frame for their execution.]

2.1.7.2 List of Documents Related to Improvement Works for Approval or Review

The following documents are specified in accordance with sub-clause 8.4.1 of the GC:

[Insert here a **list of documents** related to Improvement Works to be provided by the Contractor, such as design plans, as-built drawings, etc. Indicate which of the documents listed need approval and who is to provide such approval.]

2.1.7.3 Payment for Improvement Works

The Improvement Works indicated above will be remunerated based on the unit prices shown in the Bill of Quantities. The Contractor will invoice Improvement Works as part of the Monthly Statements and in accordance with the Improvement Works actually carried out and measured by unit price as stated in the Bill of Quantities.

2.1.8 Quality of Materials to be used

Not withstanding the provisions of Clause 30 of the General Conditions, the materials used by the Contractor shall comply with or exceed the following quality criteria:

[Indicate a **list of different types of materials** likely to be needed by the Contractor such as for concrete and steel used in structures, gravel, laterites, asphalt, paint, etc., and the minimum **quality criteria** for each of those materials]

The Contractor is informed of the existence of the following borrowing pits and or extraction sites which may be used to extract materials:

[Provide a **list including site plans** of gravel borrowing pits and other sites where suitable materials are known to exist which may be extracted by contractor. If available, indicate **qualities** of materials, with disclaimer. Indicate the **conditions for extraction**, especially the type of additional permits needed, if any, and payments to be made, if any.]

Prior to the extraction of materials for use on the roads included in the contract, the contractor is obliged (i) to carry out the laboratory tests necessary to determine the quality of the materials, and (ii) to satisfy himself that the quality of the materials is sufficient for the purpose intended.

The Contractor may also utilize materials from other sources, in conformity with the GC, provided that (i) the extraction is in conformity with the legislation, (ii) he has informed the Employer of his intention to utilize the material, and (iii) he has satisfied himself as to the sufficiency of the technical characteristics and the quality of the materials he intends to use for the intended purposes. Under no circumstances may the Contractor make any claims based on the insufficient quality of any of the materials he has used.

2.1.9 Self-Control Unit of Contractor

In conformity with sub-clause 25.2 of the GC, the Contractor is obliged to establish, within his own organizational structure, a specific Unit staffed with qualified personnel, whose task is to verify continuously the degree of compliance by the Contractor with the required Service Levels. The Self Control Unit is also responsible for undertaking the quality control testing required for Rehabilitation Works, Improvement Works and Emergency Works.

The Unit is responsible for the generation and presentation of the information needed by the Contractor for the documentation required for the Monthly Statement. In general terms, the Unit will be responsible to maintain at all times a detailed and complete knowledge of the condition of the roads or road sections included in the contract and to provide to the management of the Contractor all the information needed in order to efficiently manage and maintain the roads included in the contract. The Self-control Unit is also obliged to carry out, in close collaboration with the Project Manager, the formal and scheduled inspections of Service Levels which will take place regularly.

The compliance (non-compliance) of the Contractor with service level requirements will be reported by the Self-Control Unit to the Project Manager in the form of tables as specified in 2.2.3.

2.1.10 Communications Equipment

[Note: In accordance with sub-clause 5.3 of the GC, the Contractor is obliged to provide and maintain in operation permanently certain communications equipment. Depending on the country conditions, it may be useful to specify here the type of equipment and the number and location of units. The equipment may consist of cellular phones, satellite phones, radio equipment, fax machines, computers with E-Mail access, and/or similar.]

2.1.11 Site Regulations and Work Procedures

[Insert Site Regulations in accordance with sub-clause 18.3 GC, if any]

[Insert Work Procedures in accordance with sub-clause 17.5 GC, if any. These should however not introduce too many constraints on the Contractor, who should be able to carry out his work the way he thinks is best suited to ensure compliance with service levels.]

2.1.12 Functions of Key Personnel

[If needed, insert here a list of required key positions within contractor's staff and their functions.]

2.1.13 Specification of Service Quality Criteria

For the purposes of this contract, different service levels are required for individual roads or road sections. The following service levels will be applied:

[insert a **list** of the service levels applicable to the contract e.g. Fair, Good, Very Good, and for paved and unpaved roads.]

The service level applicable to each road or road section is given below.

[insert table listing road or road section identification, lengths, and the applicable service level. Include an appropriate summary of the information at the bottom of the table as per the Sample Table below.]

Road or Road section	Length	Required
	(km)	Service Level
Road A	33.34	Fair
Road B	58.35	Fair
Road C	18.02	Very Good
Road D	71.97	Good
Road E	16.77	Very Good
Road F	15.13	Good
Road G	7.77	Fair
Total	221.46	
Length at Very Good Service Level	34.79	
Length at Good Service Level	87.1	
Length at Fair Service Level	99.57	

2.1.14 Methods of Inspection of Service Levels

2.1.14.1 Formal Inspections of Service Levels

Formal inspections are those scheduled in advance by the Project Manager, and carried out by the Contractor (through his self-control Unit) under the supervision of the Project Manager. The main purpose of the formal inspections is to enable the Project Manager to verify the information presented in the Contractor's monthly statement and to issue the Interim Payment Certificate. The Project Manager must inform the Contractor of his intention to carry out a formal inspection at least 48 hours in advance, indicating the exact date, hour and location where the formal inspection is to begin. The Contractor is obliged to be present at the date, hour and location specified by the Project Manager, providing the physical means needed for the inspection as indicated further below. Formal inspections will normally, but not necessarily, be scheduled to begin within less than five (5) days after the presentation by the Contractor of the Monthly Statement to the Project Manager; and they should normally be completed within a maximum of three (3) days. The formal inspections allow the comparison of the information on compliance provided by the Contractor in the standard tables which are part of his Monthly Statement, with actual measurements taken in locations to be determined by the Project Manager. During the formal inspections, the Project Manager will prepare a brief Memorandum describing (i) the general circumstances of the site visit, including date, road sections visited, persons present, etc., (ii) any non-compliance which may have been detected, and (iii) the time granted by the Project Manager to the Contractor to remedy the detected defects. Based on the outcome of the formal inspection, the Project Manager will immediately correct any possible errors or misrepresentations in the Contractor's statement, countersign it and present it to the Employer for payment, and to the Contractor for information.

Formal inspections will also be scheduled for the follow-up site visits, whose purpose is to verify if the Contractor has remedied the causes of earlier non-compliance, within the time frame granted by the Project Manager and specified in the Memorandum.

2.1.14.2 Informal Inspections of Service Levels

The Project Manager may carry out informal inspections of Service Levels as part of his general mandate given to him by the Employer. He may do so on his own initiative, at any time and anywhere on the roads included in the contract. He must use his own means for those inspections. If he detects any road sections where the Service Level criteria are not met, he is obliged to inform the Contractor within 24 hours in writing, in order to enable the Contractor to take remedial action as soon as possible. The results of informal inspections may not be used by the Project Manager for purposes of correcting the Contractor's monthly statements or applying penalties or liquidated damages, except for cases in which the road has been completely interrupted and the criteria of Road Usability has not been met.

2.2 Specification for the Provision of Road Management Information

The following Service Level criteria will be applied to all the deliverables required for the ongoing management of the contract and the road network.

2.2.1 Longitudinal Profile (applicable for unpaved roads only)

In accordance with sub-clause 18.1.1 of the GC, at the time of commencement of works, the Contractor will immediately start to carry out a **topographical survey** of all the roads or road sections included in the contract, and based thereon:

- Establish the actual longitudinal profile of the roads at the time of commencement of works, and
- Determine the **required longitudinal profile** which in the opinion of the Contractor will be necessary in order to ensure not only the compliance with the service level required under the contract, but also the long-term durability of the road. In the determination of the required longitudinal profile, the Contractor must (i) take into consideration any Rehabilitation and/or Improvement Works which may be required by the contract, (ii) pay particular attention to adequate drainage and protection from flooding, and (ii) collaborate closely with the Project Manager. In particular, he must provide to the Project Manager all the information utilized, and the criteria applied, in the determination of the required longitudinal profile.

If the survey for actual longitudinal profile for some or all of the roads exists already and has been provided to the Contractor by the Employer, the Contractor will nevertheless take all the measures which are necessary to satisfy himself and the Project Manager as to the correctness of the survey data on the actual longitudinal profile at the time of commencement of works.

In the topographic survey, as well as in the preparation of the actual and required longitudinal profiles, the Contractor will closely cooperate with the Project Manager. In particular, he will ensure that the Project Manager has access to all information gathered by the Contractor and used in the preparation of the longitudinal profile.

In any case, the Contractor will complete and formally transmit to the Project Manager the completed longitudinal profiles (actual and required) within [indicate number of days] days after the start date. The Project Manager may reject the required longitudinal profiles presented by the Contractor if (i) there is clear evidence that the required longitudinal profile as presented by the Contractor is insufficient to reasonably assure all of the service levels required by the contract, or (ii) if it does not comply with requirements concerning Rehabilitation and/or Improvement Works indicated in the contract. A rejection by the Project Manager must be accompanied by clear and detailed explanations of the reasons for the rejection, and suggestions for modifications which would remedy the reasons for rejection. If the Project Manager does not reject the required longitudinal profile presented by the Contractor within twenty (28) calendar days after receipt, providing at the same time the reasons for rejection, it will automatically become the benchmark for compliance with the criteria of durability, as described elsewhere in this contract.

Nevertheless, the Contractor cannot make any claim based on actual or potential insufficiencies in the height or other characteristics of the required longitudinal profile, even (i) if a case arises in which a non-compliance with service level criteria can directly be related to such insufficiency, or (ii) if the Project Manager has approved, or failed to reject, the required longitudinal profile proposed by the Contractor.

2.2.2 Monthly Statement

The Monthly Statement to be submitted in accordance with sub-clause 49.1 shall have the following format:

[insert sample format for Monthly Statement. A sample from a contract for an unpaved network has been included on the following page]

The compliance (or non-compliance) of the Contractor will be reported by the Self-control Unit to the Project Manager in the form of tables for which a mandatory standard format is adopted. There is one table for each road or road section. The tables are part of the Contractor's monthly statement, and they may be complemented by comments for which a specific format is not required. The format of the mandatory standard table is as follows:

[Insert samples of mandatory standard tables for unpaved or for paved roads, or for both if applicable. A sample from a contract for an unpaved network has been included after the sample monthly statement.]

Monthly Statement for Contract

Road or road section: Required Service Level

Length of road at required service level (km)

Contract Name Road A and Road B Very Good

34.8

Contract Month: 12 (September 2005)

	Required compliance		Actual compliance				Non-compliance		Payment Reductio n
Service Level Criteria	Target	Km ¹	Compliance criteria	Road A	Road B	Total length compliant (km) 2	Length non-compliant (3) (1-2)	% Payment reduction (4)	$ \begin{array}{c} Km \\ (5 = 3x4) \end{array} $
1. Road Usability	100%	34.8	Interruption to traffic (km days)	100%	100%	34.8	0	1%	0
				, ,				Sub total	0
2 Average Traffic Speed	60 kph		Average speed (per 5 kph below	60 kph	60 kph	34.8	0	1%	0
			target)					Sub total	0
3. Road User Comfort	43%	15.0	Corrugation amplitude	12	14	26	0.00	50%	0
			Rut depth	8	6	14	0.96	50%	0.48
			Individual degradations	18	16.8	24.8	0.00	50%	0
			Total area of degradations	18	16.8	34.8	0.00	10%	0
			Road signs	25%	30%	9.5	5.46	25%	1.37
								Sub-total	1.85
4. Durability	38%	13.2	Vegetation height	18	16.8	34.8	0.00	25%	0
			Vegetation clearance	18	16.8	34.8	0.00	25%	0
			Useable road width	6	3	9	4.22	10%	0.42
			Longitudinal profile	Not evaluated	this month	34.8	0.00	10%	0
			Drainage	12	7	19	0.00	50%	0
								Sub total	0.42
								TOTAL	2.27

Length in km for payment at this service level this month: 32.53

 $Payment\ Summary-Contract\ OPRC/1$

Contract month: 12

Service Level	Network	Penalty	Km for payment this month	
	km	km		
VERY GOOD	34.8	2.27	32.53	
GOOD	87.1	5.62	81.48	
FAIR	99.6	7.30	92.3	
TOTAL	221.5	16.19	206.31	
Total payment due this month	Rate per km x km for payment			

STANDAL	RD REPORT	ING TABLE FOR C	COMPLIANCE WITH	H SERVICE LEV	VELS (for unpaved road	s)
Contractor:		<u></u> I	Date of inspection: Persons present:		INSPECTION OF SERVICE MONTH OF	
			CRIT	TERIA		
SECTION	ONS	ROAD USEI	R COMFORT	DURABIL	ITY OF THE ROAD	SUB-CRITERION
From	То	Complied with	Not complied with	Complied with	Not complied with	NOT COMPLIED WITH
[specify] Usability of the Ro	[specify]	[insert cross "X" or leave empty] [insert "complied wi	[insert cross "X" or leave empty] th" or "not complied with	[insert cross "X" or le empty]	eave [insert cross "X" or leave empty]	[specify sub-criterion not complied with]
complied with"]		l measured, if available]	in or nor compiled with	i j Traine Speed.	[Insert comput	a war or not
Prepared by Contract			Certified by Employer or hi			

2.2.3 Program of Performance

In accordance with clause 17.2 of the General Conditions (GC), the Contractor shall submit a Program of Performance within twenty-eight (28) days after the signing the contract agreement. The program shall include, but not be limited, to the following items:

2.2.3.1 Contractor's Quality Assurance Plan

The purpose of the Contractor's Quality Assurance Plan is to integrate the requirements of the contract and the Contractor's quality assurance systems to deliver the Services.

The Contractor's Quality Assurance Plan describes the methods and procedures which the Contractor will apply for the execution of the Contract, including how the contractor will:

- (a) identify the quality requirements specific to the contract,
- (b) plan and execute the work to satisfy those requirements
- (c) inspect and/or test the work to ensure compliance with the quality requirements
- (d) record and monitor the results as evidence of compliance, and
- (e) ensure that prompt action is taken to correct non-compliance.

The Contractor's Quality Assurance Plan must clearly describe the systems, procedures and methods that will be used to deliver and monitor compliance of the Services.

2.2.3.2 Health and Safety Management Plans

If required in the Special Conditions of Contact (PC) the Program of Performance shall include a Health and Safety Management Plan.

The purpose of the Health and Safety Management Plan is to foster a responsible attitude towards occupational health and safety and to comply with the provisions of the *[insert relevant act/regulations]*.

Because of the nature of the Services, the Contractor may occasionally be exposed to hazardous situations which could involve risk of various degrees of harm, to the contracting staff and/or the public.

Situations will arise when it is not practical to eliminate or isolate significant hazards. In these situations the hazards must be minimized by ensuring planned protection systems (e.g. equipment, clothing) are actually used.

The Health and Safety Management Plan must be complied with by the Contractor's personnel and all subcontractors at all times.

The Health and Safety Management Plan shall, when implemented in accordance with the plan requirements:

(a) Ensure the systematic identification of existing and new hazards on the work site(s)

- (b) Ensure the minimization of significant hazards, where elimination and isolation are both impractical
- (c) Ensure the provision and use of appropriate protective measures
- (d) Include emergency procedures for dealing with accidental spillage, pollution or imminent danger
- (e) Ensure regular review and assessment of each hazard identified and monitor employees exposure to these hazards
- (f) Ensure reporting and recording of work site safety incidents so health and safety problems can be addressed quickly and regularly. It is a requirement of this Contract that any such incident be advised promptly to the Project Manager.

The Delivery Time for the initial Health and Safety Program shall be not later than [indicate number of days] days after the Start Date.

2.2.3.3 Emergency Procedures and Contingency Plan

If required in the Particular Conditions (PC) the Program of Performance shall include an Emergency Procedures and Contingency Plan which shall establish the roles, practices and procedures during specific types of emergency events identified in the plans and contingency plans associated with the closure of roads. The Emergency Procedures and Contingency Plan must be developed by the Contractor and agreed with the Project Manager and any other stakeholders the Project Manager may identify.

The purpose of the Emergency Procedures and Contingency Plan is to ensure the safety of the contractor's personnel and road users in the case of emergency and/or road closure. It should include:

- an effective communication and event recording system
- the name, contact number and specific duties of the contractor's personnel nominated to respond to an emergency event
- the contact number of other parties who need to be notified in cases of emergency events, e.g. police
- detailed response procedures for all emergency events
- possible detour routes in the event of road closure

The Delivery Time for the initial Emergency Procedures and Contingency Plan shall be not later than [indicate number of days] days after the Start Date.

2.2.3.4 Traffic Management Plan

If required in the Particular Conditions (PC) the Program of Performance shall include a Traffic Management Plan. The Traffic Management Plan establishes the practices for traffic management at work sites. The Traffic Management Plan must be developed by the Contractor and agreed with the Project Manager.

The objectives of the Traffic Management Plan are to:

- (a) clearly define and document the responsibilities and chain of command for the development, implementation and management of traffic control measures and systems
- (b) establish the minimum requirements for temporary traffic control
- (c) establish the minimum geometric, cross section and surfacing standards for temporary works
- (d) provide appropriate transitions and enable safe and efficient traffic flow into, through and out of work sites
- (e) protect the Contractor's personnel at all times
- (f) protect the Assets and the Contractor's resources at all times.
- (g) meet the operational requirements for the road

The Traffic Management Plan must include at least the following:

- A documented process for preparation, review and approval of the Traffic Management Plan
- A document tracking and control system to ensure that only the latest operative copy of the Traffic Management Plan is in circulation
- Contact details for Contractor, Principal, emergency services and other stakeholders
- Layout diagrams, method statements etc for implementation of traffic control while undertaking each aspect of the Services (including site specific layout diagrams and method statements if the Services require traffic control measures not covered by standard codes of practice)

2.2.4 Updating of Road Administration Databases

The Road Administration currently operates the following data associated with the assets being maintained under this contract, either electronically or on paper.

[insert **list** – as a minimum this should include the data collected by the consultant for the preparation of the OPRC bidding document.]

The Contractor shall supply all information necessary to maintain this data in a condition of accuracy, currency and completeness appropriate to the users for which the data is intended.

The Contractor shall provide hard and/or electronic copies of the information to the Road Administrator as reasonably requested.

The delivery times and updating frequencies shall be [insert appropriate time frames, updates at three monthly intervals are recommended]

2.2.5 Handover Report

Immediately prior to the completion of the contract the Contractor shall prepare a *Handover Report*. The purpose of the Handover Report is to provide a smooth transition to the next contract and ensure that the next contractor is aware of any outstanding issues. .The Report will:

(a) Summarize any unresolved issues;

- (b) Include the most recent complete set of data on the roads covered by the contract, and
- (c) Provide the following details:
 - (i) A schedule of outstanding defects and liabilities
 - (ii) Any unresolved issues, especially those that may impact on the next Contractor
 - (iii) Details of any sensitive issues
 - (iv) Any ongoing special monitoring/maintenance needs.

2.3 Specification of Service Level Criteria for *Unpaved Roads*

The following Service Level criteria will be applied for all unpaved roads included in the contract. This section specifies the quality levels to be complied with within two overall criteria:

- Road User Service and Comfort
- Durability measures

2.3.1 Road User Service and Comfort Measures for Unpaved Roads

2.3.1.1 Usability of the Road

The Contractor will have to ensure that the road is open to traffic and free of interruptions at all times. **Permitted exceptions are:** [specify exceptions, if any]

[Note: Permitted exceptions will have to be specified depending on the local conditions of each road. They may vary between two extremes: from a minimum of a few hours closure after severe road accidents, to a maximum of several months per year for roads which are subject to regular flooding during the rainy season. Roads in mountainous areas may be subject to landslides and require more exceptions than roads in flat areas. For countries with pronounced rainy seasons, permitted exceptions may vary between the rainy season and the dry season. In some other countries, the Contractor may be allowed to install rain barriers which may remain closed during rains and up to a certain number of hours afterwards. If the contract covers a road network which includes several different classes of roads, there may also be several classes of exceptions. In general, when defining exceptions it is very important to closely look into the local conditions and to avoid excessively restrictive conditions.]

2.3.1.2 Average Traffic Speed

The Contractor has to ensure that a vehicle of the type defined further below is able to circulate in a safe manner (i) at a certain average speed defined below, and (ii) that road surface conditions never constrain the vehicle speed below a certain minimum.

Vehicle: [indicate vehicle, including brand and model]

[Note: The vehicle selected should be the most typical vehicle used by road users on the road in question. The purpose of this is to allow road users to participate, at least informally, in the inspection of compliance of the Contractor with this Service Level criterion.]

Average traffic speed:

[insert average speed]

[Note: (i) There may be more than one speed defined, if there are different requirements for different classes of roads in the network. (ii) The speed requirement may increase over time, if the Contractor is expected to gradually improve the Service Level of the road. (iii) In area with very pronounced rainy seasons and difficult soil conditions, it may be advisable to reduce the average speed requirement during the rainy season. Also, the concept of constrained minimum speed could be used in some cases, which is the lowest speed a user might be forced to slow down to because of road surface deficiencies.]

2.3.1.3 Road User Comfort

The road user must be able to circulate at a certain level of comfort and safety, which depends on several criteria which are defined below. The enforcement of the criteria for road user comfort is gradual, in the sense that it is applied to a certain percentage of the network which is growing according to the timetable shown further below, until a 100% compliance is reached after some time.

[Note: In most cases, the initial condition of the roads under contract is such that it would not be realistic to expect full compliance with the road user comfort criteria from the very beginning of the contract. It is recommended to use a timetable for compliance, a sample of which is shown further below.]

		Fair	Good	Very Good
Road Corrugation Amplitude	Permitted maximum value at any single point of road: [insert value for each service level, the recommended maximum is between 2.5 cm and 4.5 cm]			
Rut Depth	Permitted maximum value at any single point of road: [insert value for each service level, the recommended maximum is between 3.5 and 5 cm]			
Other Surface Degradations (potholes, erosions and similar types of degradations, other than corrugation and rutting)	Permitted maximum dimension of any single degradation: [insert values for each service level, the suggested value is between 30 cm to 45 cm] Permitted maximum number of accumulated degradations with any dimension greater than [insert value, the suggested value is between 15 cm and 30 cm] in any 1000 m section:			

		Fair	Good	Very Good
Cleanliness of the pavement	The road surface must always be clean			
surface and shoulders.	 and free of soil, debris, trash and other objects. Dirt, debris and obstacles must be removed: Within [insert value, the recommended time is between 1 hr and 24 hours] if they pose a danger to traffic safety. Within [insert value, the recommended value is between 3 days and 14 days] if they do not pose any danger to traffic safety. 			

2.3.2 Durability Measures for Unpaved Roads

The activities of management and maintenance of the road carried out by the Contractor during the entire period of the contract must not endanger the long-term sustainability of the road, which depends of several criteria defined below.

[Note: "Durability of the Road" is a group of criteria most of which do not directly and immediately affect the usage of the road in the short term, but which are nevertheless very important for the long-term "survival" of the substance of the road. In most cases, the initial condition of the roads under contract is such that it would not be realistic to expect full compliance with the durability criteria from the very beginning of the contract. It is recommended to use a timetable for compliance, a sample of which is shown further below.]

Required longitudinal profile	Accepted maximum negative vertical tolerance:
	[insert value, recommended value is minus three centimeters (3.0 cm below the height of the required longitudinal profile); no limit on the positive side]
Useable Road Surface width	Road 1:[insert value] meters
	Road 2:[insert value] meters
	RoadAccepted maximum negative tolerance: [insert value, recommended is a value in the order of minus 20 centimeters (20 cm less than the width of the useable road surface]

2.3.3 Variations and Gradual Compliance with Service Levels

In order to respect the Contractor's initial mobilization period, compliance with any of the service level criteria is not expected until: [insert number of days after signature or full legal notification of contract, recommended are between 60 and 90 days]

The following table summarizes the variations and gradual compliance requirements with service levels over time: [insert table]

[Note: The following table is an example from a 4-year contract which may be adapted to the Special Conditions of the contract and the roads included therein.]

SAMPLE TIMETABLE for unpaved roads (for illustration purposes only)

Timetable of compliance with Service Level requirements				
No. months	Usability of the road(s)	Average Traffic Speed	Road User Comfort	Durability of the road(s)
since beginning of Contract	Compliance required on (% of total length of roads under contract)	Minimum safe traffic speed which can be maintained (in Km/h)	Compliance required on (% of total length of roads under contract)	Compliance required on (% of total length of roads under contract)
1 and 2	No minimum set	No minimum set	No minimum set	No minimum set
3	100	40	3	2
4	100	40	8	4
5	100	50	13	7
6	100	50	18	11
7	100	50	24	15
8	100	60	30	20
9	100	60	36	25
10	100	60	42	30
11	100	60	50	35
12	100	60	60	40
13	100	60	70	45
14	100	60	80	51
15	100	60	90	57
16	100	60	100	63
17	100	60	100	69
18	100	60	100	75
19	100	60	100	81
20	100	60	100	87
21 until End of contract period	100	60	100	100

[Note: If the contract includes several groups of roads with different Service Level requirements, a separate table must be presented for each group. In countries with very pronounced rainy seasons, it may not be reasonable to request full compliance with all criteria during the rainy season, and different tables may be presented for the dry and rainy seasons. In particular, it might be necessary to suspend any increase in the percentage of the network where the Contractor must comply with User Comfort and Durability requirements. These and other potential limitations must be carefully evaluated by those preparing the Technical Specifications.]

2.3.4 Means used for Inspection of Service Levels for *Unpaved Roads*

For the formal inspections of compliance with Service Levels, the Contractor's Self-control Unit will work in close collaboration with, and under supervision of the Project Manager. The physical means needed for the inspections will be provided by the Contractor; they are the same which are normally used by the Self-control Unit for the continuous self-evaluation of the Contractor's compliance, in particular:

- (a) Vehicles of the following type: [specify number and type of vehicle]. The vehicle(s) must be in good condition and must be in conformity with its original factory specifications, without any alterations which would change its driving characteristics. [Note: The vehicle(s) should be of the type most typically used by road users. Different types of vehicles may need to be specified for different groups of roads].
- (b) Qualified and support staff [specify number and type of staff, normally it should include as a minimum the qualified staff of the Self-control Unit plus two helpers].
- (c) All tools and instruments needed, as indicated in the paragraphs describing the methodologies for inspection.

2.3.5 Methodologies to be used for Assessing Service Levels on Unpaved Roads

(a) Usability of the Road(s): There is no particular testing method for the usability of a road, other than driving on the road in a normal manner, utilizing the type of vehicle indicated in the previous paragraph. The condition is not complied with if the road is interrupted at any point. The condition is however complied with if it is possible to continue to drive on the road, and without the vehicle suffering any damage caused by the bad condition of the road.

[Note: For example, if the vehicle hits an obstacle on the road surface which causes damage to the exhaust system, the conditions is obviously not complied with. On the other hand, if there is a landslide which covers one half of the road, but it is easily possible to pass the area on the other side of the road, the condition is complied with.]

(b) Average Traffic Speed: When verifying the Average Traffic Speed, the first step is to define the road sections to be tested. The lengths of the test sections should be equivalent to at least one half hour driving time (e.g. 30 km lengths for a required average speed of 60 km/h). The second step is to travel on the defined test section in a normal and safe fashion, in the vehicle provided by the Contractor and driven by a driver provided by the Contractor. The driver must at all times respect the traffic regulation, in particular speed limits. The time of unforeseen stops which are unrelated to the road condition (such as checkpoints, breakdowns or other incidents) is to be deducted from the overall travel time. Except for normal and obligatory slowdowns and stops (at intersections, speed limits, stop signs, pedestrian crossings, village crossings, etc.), the travel speed should never be constrained by road conditions to less than a certain minimum speed given in the contract, and the average travel speed which can be maintained on the defined road section should be above the threshold value which is given in the Summary Table further below in the Technical Specifications.

In any case, the safety of the passengers of the test vehicle, as well as the safety of other road users, must never be put in danger. The judgment of whether a speed is safe or not is left to the Project Manager.

At the end of the test, the vehicle used must not have suffered any mechanical damage due to the speed of travel, which may have been excessive given the condition of the tested road section. If the vehicle has suffered such damages, the test is negative and the service level has not been complied with.

(c) Road corrugation amplitude: The road corrugation amplitude is one of the criteria for "Road User Comfort". It will be checked at road sections selected by the Project Manager based on visual appearance. Measurement is carried out by placing a ruler or straight edge (three meters long) on the road, parallel to the road axis, at a place determined by the Project Manager, and measuring the space between the ruler/straight edge and the lowest point of the corrugation wave.

The maximum amplitude of the corrugation will be recorded and if this exceeds the value for corrugation height stated in the Summary Table below the one-kilometer section in which the corrugations are located will be judged non-compliant.

(d) Rut depth: Rut depth is one of the criteria for "Road User Comfort". It will be checked at road sections selected by the Project Manager based on visual appearance. Measurement is carried out by placing a ruler or straight edge (three meters long) on the road surface, perpendicularly to the road axis, at a place determined by the Project Manager, and measuring the space between the ruler/straight edge and the lowest point of the rut.

The maximum rut depth will be recorded and if this exceeds the criteria for rut depth stated in the Summary Table below the one-kilometer section in which the ruts are located will be judged non-compliant.

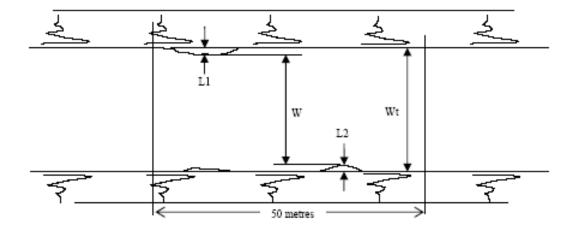
(e) Other surface degradations: Other surface degradations are part of the criteria for "Road User Comfort". They will be measured at road sections selected by the Project Manager based on their visual appearance. Individual surface degradations (such as potholes) are measured by using a standard ruler. The "equivalent diameter" is defined as the average of the greatest dimension of the degradation and a second measurement taken at right angles to the first.

For any one km of road, compliance with this criterion requires that (i) no individual surface degradation (other than ruts and corrugation) has an "equivalent diameter" of more than the maximum value specified and (ii) the number of individual degradations on a one km section is less than the threshold specified value shown in the Summary Table below.

(f) Useable road surface width: The useable road surface width is part of the criteria for the "Durability of the Road". It will be measured at road sections selected by the Project Manager based on their visual appearance, in particular at places where erosions or other degradations exist which restrict the useful width of the road. The useful width is measured by using a measuring tape and/or rulers.

For any one km section of the road, the Project Manager will select one 50-meter subsection where the measurement will take place. Within that subsection, the Project Manager will select on each side of the road the individual degradation which constitutes the largest restriction of the useable surface. For each of those two points, he will then measure the distance (L) between the theoretical edge of the useable road surface (based on the useable road width specified in the contract) and the innermost point of the degradation, obtaining two values (L1 and L2). The actual useable road surface width is obtained by subtracting (L1 + L2) from the theoretical road surface width specified in the contract.

(refer to diagram below). If either of these criteria is exceeded the one-kilometer section in which they are located will be judged non compliant.



For any one km section of road, compliance with this criterion requires that there is no sub-section of 50 meters in which the actual useful width (shown as W in the drawing) is less than the width specified in the Summary Table below (clause 2.3.6), minus the tolerance allowed as indicated in the Summary Table.

(g) Required longitudinal profile: The required longitudinal profile is part of the criteria for the "Durability of the Road". It will be measured at road sections selected by the Project Manager. During the initial period in which the Contractor carries out works destined to gradually increase the percentage of the road network in compliance, frequent measurements will be carried out, and their location will be based on the location of the works carried out by the Contractor. Once the 100% compliance is reached, the Project Manager may choose, during the remaining duration of the contract, to limit inspections to zones he considers "critical". Nevertheless, towards the end of the contract period, the entire longitudinal profile of all roads included in the contract must be verified. Measurements will be taken at the same points which were used for the establishment of the original longitudinal profile at the beginning of the contract. The pieces of equipment to be used are the instruments normally used in topographical surveys.

To be representative of a one km section, five (5) measurements must be taken which are spaced 200 meters apart from each other (distance between profiles of 200 meters).

Compliance with this criterion requires that not more than one (1) profile shows a negative tolerance superior of the value specified in the contract. Positive tolerances are accepted, unless otherwise stated in the technical specifications.

2.3.6 Summary Table for Maximum and Threshold Values

[Note: the following table is an example from a contract for unpaved roads which must be adapted to the specific requirements of the contract.]

		Traffic Speed		Road User Comfort					Durab	ility	
	Required				Other Sur Degradat		Vege	tation	Useable	road width	Longitudinal profile
Road	Service Level	Average Speed (km\h)	Max Corrugation amplitude (cm)	Max Rut Depth (cm)	Max Dimension for single degradation (cm)	Max Numbe r for 1 km long section	Min clearance above road surface (m)	Permitted maximum height (cm)	Reqd Width (m)	Tolerance (cm)	Tolerance (cm)
Road A	Fair	40	5.0	10.0	45.0	20	4.5	30	5.0	20	3
Road B	Fair	40	5.0	10.0	45.0	20	4.5	30	5.0	20	3
Road C	Very Good	60	2.5	5.0	30.0	2	4.5	30	6.0	20	3
Road D	Good	50	3.5	7.0	40.0	10	4.5	30	5.0	20	3
Road E	Very Good	60	2.5	5.0	30.0	2	4.5	30	6.0	20	3
Road F	Good	50	3.5	7.0	40.0	10	4.5	30	5.0	20	3
Road G	Fair	40	5.0	10.0	45.0	20	4.5	30	5.0	20	3

2.4 Specification of Service Level Criteria for *Paved Roads*

This section specifies the Service Levels to be complied with in the case of paved roads. There are three overall criteria:

- Road Usability
- Road User Service and Comfort Measures
- Durability Performance Measures

2.4.1 Usability of the Road

The Contractor will have to ensure that the road is open to traffic and free of interruptions at all times. **Permitted exceptions are:** [specify exceptions, if any]

[Note: Permitted exceptions will have to be specified depending on the local conditions of each road. They may vary between two extremes: from a minimum of a few hours closure after severe road accidents, to a maximum of several months per year for roads which are subject to regular flooding during the rainy season. Roads in mountainous areas may be subject to landslides and require more exceptions than roads in flat areas. For countries with pronounced rainy seasons, permitted exceptions may vary between the rainy season and the dry season. In some other countries, the Contractor may be allowed to install rain barriers which may remain closed during rains and up to a certain number of hours afterwards. If the contract covers a road network which includes several different classes of roads, there may also be several classes of exceptions. In general, when defining exceptions it is very important to closely look into the local conditions and to avoid excessively restrictive conditions.]

2.4.2 Road User Service and Comfort Measures for Paved Roads

The service level criteria for road user service and comfort on paved roads are defined as follows:

[Note: The table below is a sample which may be used as a basis for the actual table to be prepared for the bidding document. Modifications and additions may be needed in order to take into consideration the specific conditions of any given country or road network. Additional text may need to be added in order to explain in more detail any specific criteria, if deemed necessary.]

Item	Service Level	Measurement/ Detection	Time allowed for repairs or Tolerance permitted
Potholes -	Permitted maximum dimension of any single pothole [insert value, the suggested value is between zero and 40 c]). Permitted maximum number of accumulated potholes with an equivalent diameter greater than 100 mm in any continuous 1,000m section. [Insert value, suggested value is between zero and 10 per km of road)].	Visual inspection. Ruler	No tolerance allowed

Item	Service Level	Measurement/ Detection	Time allowed for repairs or Tolerance permitted
Patching	Patches (i) shall be square or rectangular, (ii) shall be level with surrounding pavement, (iii) shall be made using materials similar to those used for the surrounding pavement, and (iv) shall not have cracks wider than three (3) mm.	 Visual inspection (for detection of shape and material used Ruler (to check if patch is level with surrounding pavement Small transparent ruler (for cracks) 	Non-complying patches must be repaired within days after their detection [insert value for each service level – a period between 7and 28 days is recommended].
Cracking in pavement (A crack is a linear opening in pavement with a width of more than 3 mm.)	There shall not be any cracks more than 3 mm wide.	Crack widths measured with small transparent ruler. For isolated cracks , the "cracked area" includes 0.5 m on each side of the crack, multiplied by the length of the crack plus 0,5 m at each end.	Cracks more than 3 mm wide must be sealed within [insert Value – a period of 28 days is recommended] days after their detection.
Multiple cracks in the pavement	For any 50m section of the pavement, the cracked area cannot be more than ten (10) percent of the pavement surface.	For multiple cracks and cracks crossing each other, the "cracked area" is equivalent to a square area, parallel to the lanes, which fully encloses the cracks, and where the closest crack is at least 0.25 m away from the sides of the square.	Areas with multiple cracks must be sealed within [insert Value- a period of 28 days is recommended] days after their detection.
Cleanliness of the pavement surface and shoulders.	The road surface must always be clean and free of soil, debris, trash and other objects.	Visual inspection	Dirt, debris and obstacles must be removed: within [insert value for each type of service level, the recommended time is between 1 and 8 hours] if they pose a danger to

Item	Service Level	Measurement/ Detection	Time allowed for repairs or Tolerance permitted
			traffic safety Within [insert value for each service level the recommended value is between 3 days and 14 days] if they do not pose any danger to traffic safety.
Rutting	There shall not be ruts deeper than [insert value] mm. Rutting of more than ten (10) mm shall not be present in more than 5 percent of any of the road sections defined in the contract. [Note: A maximum allowable rut depth of between 20 and 40 mm is recommended]	Measured with 2 rulers (horizontal ruler of three 3 m length placed perpendicularly across lane; rut depth measured as space between horizontal ruler and lowest point of rut, using a small ruler with scale in mm)	Rutting above threshold value must be eliminated within [insert number a period between 28 - 56 days is recommended] of days.
Raveling	Raveled areas must not exist.	Visual inspection.	Raveled areas must be sealed within [insert value for each service level, the recommended value is between 28 – 56 days]) days after their detection.
Loose Pavement edges	There shall not be loose pavement edges, or pieces of pavement breaking off at the edges.	Visual inspection	Repairs must be completed within days after the detection of the defect. [insert Value for each service level – a period between 28 and 56 days is recommended)

Item	Service Level	Measurement/ Detection	Time allowed for repairs or Tolerance permitted
Height of shoulders vs. height of pavement	Difference in height at edge of pavement shall not be more than [insert value] mm. [Note: A maximum of 75 mm should not be exceeded.]	Measured with ruler, with scale in mm.	Repairs must be [insert Value for each service level – a period between 28 and 56 days is recommended] completed within days after the detection of the defect.
Paved shoulders	Must always be sealed to avoid water penetration without deformations and erosions free of potholes and erosions	Visual inspection	Repairs must be completed within days [insert Value for each service level— a period between 28 and 56 days is recommended] after the detection of the defect.

2.4.2 Durability measures for paved roads

2.4.2.1 Road Roughness

The Contractor is responsible for ensuring that the road roughness is below the threshold values given in the table below: [insert table, see sample table below.]

[Note: Although road roughness could also be considered a Road User Comfort Measure, for the purposes of this contract it is considered to be a Road Durability Measure.]

[Note: There are three threshold values:

- Average for complete road(s) or road section(s) - indicate maximum acceptable IRI for each road or road section]
- Maximum allowed average for any one-km section within road or road section - indicate maximum one-km average IRI for each road or road section
- Maximum allowed average for any new pavement constructed as part of the rehabilitation works.]

Item	Service Level	Measurement/Detection	Time allowed for repairs or tolerance permitted
Maximum IRI for any one-km section of existing pavement	Average value for any one-km road section must be less than the threshold value given below (in IRI average)	Measured with calibrated equipment (Bump Integrator).	No tolerance allowed.
	Road 1: IRI Road 2: IRI Road 3: IRI		
	Road		
Maximum IRI for any length of new pavement	Average value for any one-km road section must be less than the threshold value given below (in IRI average) Road 1: IRI Road 2: IRI Road 3: IRI Road 3:	Measured with calibrated equipment (Bump Integrator).	No tolerance allowed.
Average Pavement roughness for entire road	Average value for entire road or road section must be less than the threshold value given below (in IRI average) Road 1: IRI Road 2: IRI Road 3: IRI	Measured with calibrated equipment (Bump Integrator).	No tolerance allowed.

2.4.2.2 Road Deflection

The Contractor is responsible for ensuring that the average road deflection of any one-km road section is below the threshold values given in the table below: [insert table, see sample table]

Item	Service Level	Measurement/Detection	Time allowed for repairs or tolerance permitted
Deflection	Average of section must be below the threshold values indicated for each road section. Road 1: Road 3: Road	Measured with Benkelman beam every 50 meters. Threshold value is average for sections ofmeters.	No tolerance allowed.

2.4.2.3 Pavement Width

The Contractor is responsible for ensuring that the pavement width is at least as wide as specified below [insert table; the minimum pavement width should be defined for each section of road in the contract]

Item	Service Level	Measurement/Detection	Time allowed for repairs or tolerance permitted
Pavement Width	Pavement width must be at least wide as specified in the contract	Manual measurement using a metallic measuring tape	No tolerance allowed

2.4.3 Variations and gradual compliance with Service Levels

In order to respect the Contractor's initial mobilization period, compliance with any of the service level criteria is not expected until: [insert number of days after the Start Date]

[Note: the following table is an example which must be adapted to the specific requirements of the contract]

SAMPLE TIMETABLE for paved roads (for illustration purposes only)

	Timetable of compliance with Service Level requirements			
No. months since beginning of Contract	Usability of the road(s) Compliance required on (% of total length of roads under contract)	Road User Comfort Compliance required on (% of total length of roads under contract)	Durability of the road(s) Compliance required on (% of total length of roads under contract)	
1 and 2	No minimum set	No minimum set	No minimum set	
3	100	3	2	
4	100	8	4	
5	100	13	7	
6	100	18	11	
7	100	24	15	
8	100	30	20	
9	100	36	25	
10	100	42	30	
11	100	50	35	
12	100	60	40	
13	100	70	45	
14	100	80	51	
15	100	90	57	
16	100	100	63	

	Timetable of compliance with Service Level requirements			
No. months since beginning of Contract	Usability of the road(s) Compliance required on (% of total length of roads under contract)	Road User Comfort Compliance required on (% of total length of roads under contract)	Durability of the road(s) Compliance required on (% of total length of roads under contract)	
17	100	100	69	
18	100	100	75	
19	100	100	81	
20	100	100	87	
21	100	100	93	
22 until End of contract period	100	100	100	

[Note: If the contract includes several groups of roads with different Service Level requirements, a separate table must be presented for each group. In countries with very pronounced rainy seasons, it may not be reasonable to request full compliance with all criteria during the rainy season, and different tables may be presented for the dry and rainy seasons. In particular, it might be necessary to suspend any increase in the percentage of the network where the Contractor must comply with Road User Comfort and Durability requirements. These and other potential limitations must be carefully evaluated by those preparing the Technical Specifications.]

2.4.4 Means used for Assessing of Service Levels for Paved Roads

For the formal inspections of compliance with Service Levels, the Contractor's Self-control Unit will work in close collaboration with, and under supervision of the Project Manager. The physical means needed for the inspections will be provided by the Contractor; they are the same which are normally used by the Self-control Unit for the continuous self-evaluation of the Contractor's compliance, in particular:

- (a) Vehicles of the following type: [specify number and type of vehicle]
- (b) [Note: The vehicle(s) should be of the type most typically used by road users. Different types of vehicles may need to be specified for different groups of roads.]
- (c) Qualified and support staff: [specify number and type of staff, normally it should include as a minimum the qualified staff of the Self-control Unit plus two helpers.]
- (d) All equipments, tools and instruments needed, as indicated in the paragraphs describing the methodologies for inspection.

2.4.5 Methodologies and Procedures to Be Used for Measurement of Service Levels on Paved Roads

2.4.5.1 Methodologies for Durability Measures

The methodologies to be used for inspections of Service Levels are as follows: [Identify methods; if needed, give details in annexes]

[Note: This section must be complemented by a detailed description of the methodologies to be used for measuring Service Levels for paved roads in particular. The following general guidance should be taken into consideration:

Roughness

A range of devices are available to measure the ride quality of a road as indicated by the roughness statistic. While variations exist, these different devices can broadly be categorised into one of the following two types:

- Response type meters
- Profilometers

The former of the two yields an estimate of the road roughness directly from the movement of the vehicle along the road. These need to be calibrated against a reference roughness. Examples of this approach include the Bump Integrator.

The second grouping of devices record the elevation profile of the road surface and this is used to establish the roughness. Within this class of devices are simple hand pushed devices, through to vehicle mounted systems.

For flexibility in the use of the data, outputs should be expressed both in International Roughness Index (IRI in m/km) plus any local variations in use (NAASRA counts, Bump Index etc).

The reporting interval for the roughness data should be such that it is both sufficiently long to include all the wavelengths of road profile that make up roughness, but also sufficiently short that the maintenance contractor can identify the discrete defects that are adding to the overall roughness. Often these two competing demands will result in two separate values being provided, one summarised at 50 or 100m intervals, and the other at 10 or 20m intervals.

In deciding what method to use to record roughness, a number of factors should be considered, including:

- The required accuracy of measurements. Typically, if there are financial consequences (bonuses or penalties) involved, then more accurate information is required.
- The robustness of the equipment in comparison to the operating conditions likely to be experienced. While often of a lower accuracy, the response type meters are often more robust than the high technology devices.
- The technology to be used in maintaining and rehabilitating the road network. There is little point in measuring the roughness to the nth degree, if the work is then undertaken to a relatively low standard using low technology methods.

Typically, response-type meters are used when the roughness is > 6 m/km IRI or the roads are unsealed. Profilometers are used when high precision is required.

Regardless of what device is used, it must be calibrated/validated over the range of road conditions and vehicle speeds reasonably expected during the surveys. Such calibration/validation should be undertaken during the data collection phase as per the manufacturer's recommendations and from observations during previous use.

Deflection

The deflection of a road is taken to be an indication of it's load carrying capacity. Like roughness, various methods exist to determine the strength of the pavement, with the more common being the Falling Weight Deflectometer (FWD) and the Benkelman Beam (BB). With both of these devices, a weight is applied to the road and then the resulting deflection of the road surface measured. The magnitude and shape of the deflections at various distances from the load are then used to infer the structural capacity.

The interval of testing for network management is generally lesser than that required for pavement design. While results at 10m or 20m intervals may be required for pavement design purposes, for network management intervals of several hundred meters are quite common. The more uniform the construction methods and subgrade conditions, then the greater the interval of testing can be without a substantial loss in confidence in the results.

Moisture and other factors can play a significant part in the deflections measured and hence in determining the remaining life of the pavement. It is necessary to document what methodology will be utilized to normalize results from one survey to the next. This is particularly so when bonus/penalty payments are at risk based on the estimated remaining life of the pavement.

There is a strong body of evidence that indicates deflections do not change greatly from one year to the next, until nearing the time of pavement structural failure. On this basis, a rolling programme of testing may well provide sufficient results for the management of the assets.]

2.4.5.1.2 Procedures for Inspection

The formal inspections of Service Levels on paved roads will be carried out following the procedures presented in this section.

(a) Usability of Road

There is no particular testing method for the usability of a road, other than driving on the road in a normal manner, utilizing the type of vehicle indicated in the previous paragraph. The condition is not complied with if the road is interrupted at any point. The condition is however complied with if it is possible to continue to drive on the road, and without the vehicle suffering any damage caused by the bad condition of the road.

(b) Road User Comfort Measures and Pavement Width

Procedures for the inspections of operation measures and pavement width aspects of the road shall be in accordance with Clause 2.1.14.1.and Clause 2.4.2

(c) Road Roughness

Every year and each time a pavement has been modified through rehabilitation, overlay or similar works, the road roughness will be measured by the Contractor under supervision of the Project Manager. The methodology to be used for measurement is presented in the corresponding annex of the Specifications.

If the measurement reveals that the road roughness is above the threshold established, the Project Manager will establish a time frame for the Contractor to take the measures necessary correct the

defect. That time frame should normally ensure that the corresponding works are completed within four months and before the next measurement is due to be carried out. The Project Manager may however grant a longer period if, in the opinion of the Project Manager, the circumstances warrant such longer period.

The criteria for "Road User Service and Comfort" will be checked at road sections selected by the Project Manager based on visual appearance. If the measured value exceeds the specified maximum value the one-kilometer section in which the defect occurs will be judged non-compliant.

The liquidated damages for non-compliance with the Service Level requirement on road roughness, beyond the time limit determined by the Project Manager, is set at [insert amount and unit].

[Note: It is recommended to set an amount per 100 meter section of each non-complying travel lane; suggested amount is US\$ 4 per day of non-compliance. For example, for a non-complying section of 5,000 meter of a two-lane road, the liquidated damages would be US\$400 per day.]

(d) Road Deflection

The Contractor is required to guarantee that the pavement deflection of the roads under contract is below the threshold values indicated in the Technical Specifications, at a certain point of time during the contract. That point of time is: [insert point of time]

[Note: The main purpose of this Service Level criterion is that the roads under contract are in a sound structural condition at the end of the contract period. This criterion must be safeguarded through an adequate warranty, such as a performance guarantee. The point of time for compliance should be determined in such a way as to enable the Contractor to carry out the necessary strengthening works before the end of the contract. The suggested point of time is one year before the end of the contract. For contracts covering larger road networks, a staggered timetable could be set in which different points of time are set for separate parts of the network. For example, 40% of the network must comply 18 months before the end of the contract, another 40% must comply 12 month before the end of the contract, and the remaining 20% must comply 6 month before the end of the contract.]

The methodology to be used for measuring road deflection is described in the corresponding annex to the Specifications.

For each road under contract, the Contractor is obliged to measure pavement deflection at least once a year, as part of his normal activities of monitoring and evaluation. He will inform the Project Manager at least one week in advance about the time and location of pavement deflection measurements to be carried out, in order to enable the Project Manager to assist the process and verify the results. If during any of those measurements it is revealed that the pavement deflection is above the threshold established, the Project Manager will establish a time frame for the Contractor to take the measures necessary to correct the defect, and to have completed those measures at the point of time established for compliance. The Project Manager may however grant a longer period if, in the opinion of the Project Manager, the circumstances warrant such longer period.

The Employer is entitled to retain the performance guarantee provided by the Contractor until all the roads under contract comply with the pavement deflection criteria. If at the end of the contract period, the Contractor has not complied with the Service Level criteria on pavement deflection, the Employer is further entitled to employ other contractors to carry out the works necessary to ensure compliance with pavement deflection criteria, and use the amount of the performance guarantee,

wholly or in part, to pay for those works. In any case, if at the end of the contract period, the Contractor has failed to carry out the works necessary to remedy any non-compliance with the pavement deflection criteria, the Contractor forfeits any right to obtain reimbursement of the performance guarantee.

2.5 Signaling and Road Safety

2.5.1 Service Levels Measures for Signaling and Road Safety

The Contractor is responsible for ensuring that all horizontal and vertical signaling, as well as guardrails and other road safety devices fully comply with [insert either a complete inventory for the roads under contract, or a certain national or international standard which may have been adopted.].

The Service Level requirements for signaling and road safety devices are as shown in the following table: [see sample table below]

Item	Service Level	Measurement/ Detection	Time allowed for repairs or Tolerance permitted
Information signs	Signal has to be present, complete, clean, legible, and structurally sound	Visual inspection	Absent or defect signs must be replaced within fourteen (14) days.
Warning signs	Signal has to be present, complete, clean, legible and structurally sound; and clearly visible at night °	Visual inspection	
Traffic ruling signs	Signal has to be present, complete, clean, legible and structurally sound; and clearly visible at night.	Visual inspection	
Horizontal demarcation: and/or pavement paint	Have to be present, legible and firmly attached to pavement. Micro spheres must be firm and visible.	Visual inspection	Guardrails damaged by accidents must be replaced within seven (7) days
Mileposts and guidance posts	Have to be present, complete, clean, legible and structurally sound; surface painted or otherwise covered.	Visual inspection	
Guardrails	Have to be present, clean, without any significant damage, without corrosion.	Visual inspection	

2.5.2 Variations and gradual compliance with Service Levels for Signaling and Road Safety

In order to respect the Contractor's initial mobilization period, compliance with any of the service level criteria shall be in accordance with the timetable for Road User Service and Comfort Levels.

Other limitations to the compliance requirement are:

2.5.3 Procedures for Inspection

The visual inspection will be undertaken as part of the Formal and Informal inspections The criteria for Signaling and Road Safety will be checked at sections selected by the Project Manager based on visual appearance. The Project Manager shall be the sole judge of compliance. If a specified criterion is not meet, the one-kilometer section in which the deficit occurs will be judged non-compliant.

2.6 Drainage

2.6.1 Service Levels

In general terms, the Contractor must ensure that all drainage elements and structures are without any obstructions which may reduce their normal cross-section and impede the free flow of water.

The Service Level requirements for drainage structures or devices are as shown in the following table: [see sample table below]

Item	Service Level	Measurement Detection	Time allowed for repairs or Tolerance permitted
Ditches and vertical drains with lining	Must be clean and lining without any significant damage of the lining.	Visual Inspection	Tolerance permitted: Obstructions equivalent to less than 10% of capacity of item. Obstructions must be cleared within seven (7) days after detection. Damages must be repaired within three weeks after detection.
Ditches and vertical drains without lining	Must be clean and free of obstacles.		
Collectors	Must be clean and free of obstacles, and without structural damage. Must be firmly contained by surrounding soil or material.		
Culverts and similar	Must be clean and free of obstacles, and without structural damage. Must		

Item	Service Level	Measurement Detection	Time allowed for repairs or Tolerance permitted
	be firmly contained by surrounding soil or material.		

2.6.2 Variations and Gradual Compliance with Service Levels

In order to respect the Contractor's initial mobilization period, compliance with any of the service level criteria shall be in accordance with the timetable for Road Durability Criteria specified in /insert clause number/.

2.6.3 Procedures for Inspection

The cleanliness and condition of drainage structures (including ditches, Irish crossings and all other types of drainage devices) is part of the criteria for the "Durability of the Road". It is verified on a regular basis, in particular before and during the rainy season. The drainage structures to be verified are determined by the Project Manager. Inspection is done visually.

The basic principle used to determine the cleanliness of drainage structures or devices is "the percentage of the theoretical cross-section of the structure or device which is unobstructed". This percentage is specified in the Summary Table above. For a one km road section, the cleanliness of drainage ditches must be verified at least on two subsections of 50 meters each.

For any one km section of the road, compliance with this criterion requires that (i) all drainage structures are clean in the sense defined above; (ii) all structures and devices are structurally sound, based on the judgment of the Project Manager.

2.7 Vegetation

2.7.1 Service Levels

This section specifies the Service Levels to be complied will in the case of vegetation growing within the road right-of-way:

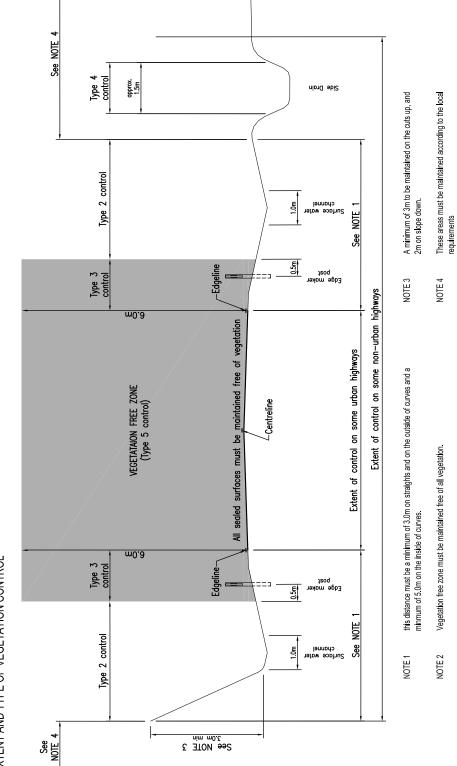
Vegetation is to be controlled to the heights, at the locations and with the restrictions as set out in the table and diagram below.

[insert table and associated diagram to define criteria].

[Note: the following table and diagram is an example which must be adapted to the specific requirements of the contract

Table 1: Vegetation Control Types

		ation Control Types		
Type	Height (mm)	Features Applied To:		
1	25 – 75	Urban highway shoulders, medians, traffic islands and highway verges, grass in rest areas (including around rest area furniture).		
2	25 200	Non-urban roads and large vegetated areas, including surface water channels with		
2	25 – 300	longitudinal gradient \geq 3%.		
3	Vegetation Free or Near	Vegetation control around:		
	Vegetation Free ¹ [Note	Edge marker posts		
	vegetation up to 200 mm high may be acceptable in	• Signposts		
	these zones]	Bridge end and culvert markers		
		Guardrails		
		Sight rails		
		Lighting Columns		
		Bridge abutments		
4	Vegetation Free or Near	Applies to vegetation control around:		
	Vegetation Free ¹	Culvert ends		
		Culvert headwalls		
		Side drains		
		Culvert waterways		
		• Surface water channels with gradient < 3% (except where nominated for		
		mowing in the specific contract requirements)		
		Weigh pits		
		Kerb and channel		
		Lined channels		
		All sealed surfaces		
		Metalled shoulders		
		Bridge decks.		
5	Growth removed when it encroaches into the Vegetation Free Zone	Applies to vegetation control of vegetation in the envelope, including trees, scrub or branches hanging into the Vegetation Free Zone (within 0.5m of the line of the edge marker posts or to within 6.0m above the pavement)		
	from the side or top.	(See Diagrams 6 and 7)		



EXTENT AND TYPE OF VEGETATION CONTROL

2.7.2 Variations and Gradual Compliance with Service Levels

In order to respect the Contractor's initial mobilization period, compliance with any of the service level criteria shall be in accordance with the timetable for Road User Service and Comfort Measures specified above. [Insert Clause number]

Other limitations to the compliance requirement are:

[Note: Limitations may vary between one road and other and may include limitations on the use of herbicides etc]

2.7.3 Means used for Assessing Compliance with Service Levels

The height of vegetation, and its clearance above the road surface, is part of the criteria for the "Road User Comfort". They will be measured at road sections selected by the Project Manager based on their visual appearance. The height is measured by using a ruler; it is defined as the vertical distance between the ground and the highest point of the vegetation. Clearance is also measured with a ruler; it is defined as the distance between the lowest point of the tree (or other plant) above the road surface.

The average height of vegetation in a one km section will be equal to the average of five values measured in at sections selected by the Project Manager.

For any one km section of road, compliance with this criterion requires that the average vegetation height measured within the section of one km is below the maximum value stated in the contract.

2.8 Structures

The Contractor is responsible for the routine maintenance of all bridges and similar structures along the roads and road sections included in the contract. In particular, he will be responsible for the correct functioning of the structures (paint of metallic structures, road surface on structures, condition and presence of guardrails) and the safety and comfort of road users while using the structures at normal speeds. Nevertheless, the reconstruction and improvement of bridges and similar structures is excluded from the Contractor's obligations, unless specified elsewhere in the Technical Specifications.

2.8.1 Service Levels

The Service Level requirements for bridges and retaining walls and similar structures are as shown in the following table:

[Note: The table below is a sample which may be used as a basis for the actual table to be prepared for the bidding document and the contract. Modifications and additions may be needed in order to take into consideration the specific conditions of any given country or road network. Additional text may need to be added in order to explain in more detail any specific criteria, if deemed necessary.]

Item	Service Level	Measurement/ Detection	Time allowed for repairs or Tolerance permitted
Steel or	Guardrails must be present and not	Visual	Contractor must immediately
other metal	deformed. All metal parts of overall	inspection	notify Project Manager in case
structures	structure shall be painted or otherwise		of any condition which threatens
	protected and free of corrosion. Drainage		structural integrity of the
	system in good condition and fully		structure
	functional.		
Concrete	Guardrails must be present and painted.	Visual	Contractor must immediately
structures	Beams and all other structural parts must	inspection	notify Project Manager in case
	be in good conditions and fully		of any condition which threatens
	functional. Drainage system in good		structural integrity of the
	condition and fully functional.		structure
Expansion	Clean and in good condition	Visual	Damages and defects must be
joints		inspection	repaired within seven (7) days.
Retention	Contractor must control presence and	Visual	
walls	adequate condition of retention walls and	inspection	
	their drainage.		
Riverbeds	Contractor must ensure free flow of water	Visual	Causes for non-compliance
	under bridge and up to 100 meters	inspection	must be eliminated within
	upstream. Contractor must maintain		fourteen (14) days after water
	design clearance under bridge. The		has sufficiently receded to allow
	Contractor shall take all reasonable		minimum working conditions.
	measures to control erosion around bridge		
	abutments and piers.		

2.8.2 Variations and gradual compliance with Service Levels

In order to respect the Contractor's initial mobilization period, compliance with any of the service level criteria is not expected until [insert number of days after signature or full legal notification of contact recommended are between 60 and 90 days]

Other limitations to the compliance requirement are:

[Note: Limitations may vary between one road and other. In some cases, it may be convenient to prepare a table similar in structure to the table used for unpaved roads]

2.8.3 Procedures for Inspection

The visual inspections will be undertaken as part of the Formal and Informal Inspections The criteria for Structures will be checked at points selected by the Project Manager based on visual appearance. The Project Manager shall be the sole judge of compliance. If a specified criterion is not meet, the one-kilometer section in which the deficit occurs will be judged non-compliant. [Note: If so desired by the Road Administration the specification may stipulate an annual inspection of all structures by a qualified structural engineer or Bridge Inspector. Alternatively this inspection may be part of the terms of reference of the Supervising Engineer]

2.9 Slopes – Cuts and Embankments

The Contractor is responsible for the maintenance of all embankment and cut slopes along the roads sections included in the contract. In particular he is responsible for ensuring they are stable, without deformations and erosions. Nevertheless, the reconstruction and major improvements to retaining structures and slope stabilization is excluded from the Contractor's obligations, unless specified elsewhere in the Technical Specifications.

2.9.1 Service Levels

The Service Level requirements are shown in the following table. [Note: The table below is a sample which may be used as a basis for the actual table to be prepared for the bidding document and the contract. Modifications and additions may be needed in order to take into consideration the specific conditions of any given country or road network. Additional text may need to be added in order to explain in more detail any specific criteria, if deemed necessary.]

Item	Service Level	Measurement/Detection	Time allowed for repairs or Tolerance Permitted
Embankment slopes	Without deformations and erosions.	Visual inspection	Repairs must be completed within seven (7) days after the detection of the defect.
Removal of slides	Slides of slope material onto the road are considered an Emergency if the quantity of the material is above 500 m³, or If the slide blocks all lanes and the road traffic is completely interrupted, and quantity is above 50 m³.	If the contractor intends to invoke the contract provisions for emergencies, he estimates the quantities and immediately informs Project Managers, who them verifies.	Traffic flow to be reestablished within a maximum of 6 hours. Period for removal of other slide material is set by Project Manager as specified under provisions for emergencies.
Slopes in cuts	Slopes in cuts must be stable and/or adequate retaining walls and slope stabilization measures must be in place.	Visual inspection for slope material on shoulders or pavement	Fallen slope material must be removed Quantities below 50 m³: • from pavement within 4 hours after detection • From shoulders within 48 hours after detection. Between 50 m³ and 500 m³ • from pavement within 24 hours after detection • from shoulders within 96 hours after detection Note: For landslides classified as "emergency" different rules apply.

2.9.2 Variations and gradual compliance with Service Levels

In order to respect the Contractor's initial mobilization period, compliance with any of the service level criteria shall be in accordance with the timetable for Road Durability Criteria specified above in [Insert clause number).

2.9.3 Procedures for Inspection

The visual inspection will be undertaken as part of the Formal and Informal inspections The criteria for Slopes will be checked at sections selected by the Project Manager based on visual appearance. The Project Manager shall be the sole judge of compliance. If a specified criterion is not meet, the one-kilometer section in which the deficit occurs will be judged non-compliant.

2.10 Payment Reductions and Liquidated Damages

In accordance with the relevant clauses of the GC, Payment Reductions are applied in case of non-compliance with Service Level requirements, while Liquidated Damages are applied in the case of non-compliance with required Rehabilitation and Improvement Works.

2.10.1 Determination of Payment Reductions

The results of each formal inspection of the Service Levels and other performance criteria will be recorded by the Project Manager in the form of a Memorandum. The Memorandum will state the type and location of any non-compliance detected, in particular those non-compliances already shown in the standard tables provided by the Contractor as part of their monthly statement. For each individual case of non-compliance, the Project Manager will determine a date by which the Contractor must have completed the necessary measures in order to remedy the cause of the non-compliance. A follow-up site visit is therefore necessary at the date fixed by the Project Manager, or soon thereafter, in order to verify that the Contractor has indeed remedied the cause of non-compliance.

If at the date indicated in the Memorandum, the Contractor has not remedied the cause for non-compliance, independent of the reason given for their failure to do so, the Contractor is subject to Payment Reductions in accordance with the relevant clauses of the GC.

Payment Reductions are variable over time. If the Contractor fails to remedy a cause of non-compliance for which a payment reduction has already been applied, the amount of the payment reduction increases month by month for that particular cause of non-compliance, without a ceiling being applied, until compliance is established.

The calculation of the initial (first month) amounts of payment reductions, and the formula for their adjustment over time, is to be based on the following rules:

For unpaved roads: The following table applies:

[insert **Table** for calculation of Payment Reductions.]

[Note: The following Table is provided as a sample for unpaved roads taken from an existing contract. It may provide some guidance to the staff preparing specific bidding documents. It goes without saying that it needs to be adjusted for the specific situation of the area in which the roads under contract are located. The preparation of this table is probably the most difficult and delicate part of the overall preparation of the bidding document. If the unit rates of the penalties are too high, the potential bidders will perceive a high risk and offer high prices, or not present an offer at all. It the unit rates are too low, the Contractor will have an insufficient incentive to comply with the requirements of the contract. It is strongly advised to carry out a number of simulations taking into consideration likely situations of partial non-compliance which may occur.]

CRITERIA	CONDITIONS FOR APPLICATION OF PAYMENT REDUCTIONS	UNIT RATES FOR NON COMPLIANCE	REFERENCE TO TECHNICAL SPECIFICATIONS (PARAGRAPH NO.)	REFERENCE TO INSPECTION METHODOLOG Y (PARAGRAPH NO)
Road Usability	Interruption of motorized traffic (light and/or heavy vehicles) anywhere along a new road or road section.	20% of monthly lump sum for the entire road and all other affected roads included in the contract for each day of non-compliance		
Average Traffic Speed	Average traffic speed on road or road section is below the required threshold value	10% of monthly lump sum, applied to the entire road for each step of 5 km/h below the threshold		
Road User Comfort	Corrugation amplitude (maximum): The maximum amplitude measured anywhere in a on km section is above the threshold value.	50% of the monthly lump sum for the length of road which does not comply		
	Rut depth (maximum): the maximum rut depth measured anywhere in a one km section is above the threshold value	50% of the monthly lump sum for the length of road which does not comply		
	Surface degradations: Either the maximum size or number exceed the threshold values anywhere in a one km section	50% of the monthly lump sum for one km applied to each one-km section which does not comply		
Signage & Road Safety	Vertical Traffic Signaling: One or more traffic signs is absent, destroyed, non-legible, incorrectly placed or non-functional	25% of the monthly lump sum for one km, applied to each on-km section which does not comply.		
Vegetation	Vegetation height (maximum): The maximum height measured anywhere in a on-km section is above the threshold value	25% of the monthly lump sum for one km, applied to each on-km section which does not comply.		
	Vegetation (clearance above road): The vertical clearance between the road surface and the lowest point of tree or other plan is less than the threshold value	25% of the monthly lump sum for one km, applied to each on-km section which does not comply.		

CRITERIA	CONDITIONS FOR APPLICATION OF PAYMENT REDUCTIONS	UNIT RATES FOR NON COMPLIANCE	REFERENCE TO TECHNICAL SPECIFICATIONS (PARAGRAPH NO.)	REFERENCE TO INSPECTION METHODOLOG Y (PARAGRAPH NO)
Road Durability	Useable road surface width: For a one-km section, to be measured in subsections of 50m each. The useable road width is determined for each subsection. If the useable road width in any of the sub-sections is below the threshold value minus the tolerance allowed, the one-km section does not comply	10% of the monthly lump sum for one km applied to each one-km section which does not comply.		
	Required longitudinal profile: For a one-km section, if two or more of the twenty profiles show a height less than the height required in the longitudinal profile, minus the allowed tolerance, the one-km section does not comply	10% of monthly lump sum for one km, applied each one-km road section, for each step of 3 cm below the threshold		
Drainage	Cleanliness and condition of drainage structures (lateral ditches): For a one-km section, to be determined for subsections of 50 m each. If unacceptable obstructions exist in more than one subsection, the one-km section does not comply	50% of the monthly lump sum for one km, applied to each one-km section which does not comply		

Note:

- (i) The Unit Rates of payment reductions ("PR_u) shown in the above table are applicable during the first 30 days of non-compliance.
- (ii) If a non-compliance has not been remedied within thirty days, liquidated damages for periods beyond 30 days are calculated based on the following formula:

$$PR = 2^n PR_u$$

considering:

J = number of days of non-compliance, and $n = \left\{ \frac{J-1}{30} \right\}$ rounded up to full number (without decimals)

For paved roads, there are three types of Payment Reductions:

- (i) **Payment Reductions for non-compliance with Road User Service Comfort Measures:** For any road or road section as specified in Section II of this document (Bid Data Sheet), the Employer may reduce the monthly lump-sum payment by the percentage of non complying kilometers as determined by the Project Manger each month. [Clause 2.1.14.1]. The payment will therefore be the basic lump-sum multiplied by the ratio of length of complying road to the total length of the network.
- (ii) **Payment Reductions for non-compliance with road roughness criteria:** Calculated based on the provisions shown in section 2.5.4.2 (b) of the Technical Specifications. The amount of the reduction is to be deducted by the Employer from the monthly lump-sum payments due to the Contractor.
- (ii) Payment Reductions for non-compliance with pavement deflection criteria: In case of non-compliance, the payment reductions are equivalent to the amount needed by the Employer to have the works carried out which are necessary to establish the conditions of compliance which the Contractor should have complied with according to the contract. However, the maximum amount of payment reduction applicable by the Employer for non-compliance with Service Level criteria on pavement deflection is equivalent to the performance guarantee provided by the Contractor for the entire contract.

2.10.2 Determination of Liquidated Damages

[insert section on how to determine Liquidated Damages in case of non-compliance with performance criteria for Rehabilitation and Improvement Works. This should be done on a case by case basis, given that that the extent of rehabilitation and improvement works can be vastly different from one contract to another.]

Proposed sample text for Section VI, Part C Specifications for Emergency Works

List of Contents

Part CI	Specifications for Emergency Works	
1.	Definition of "Unforeseen Natural Phenomena"	
2.	Procedure for requesting Emergency Works	
3.	Remuneration of Emergency Works	
4.	Provision for Emergency Works	
5.	Obligations of Contractor during Emergencies and Emergency Works	
6.	Minor repairs made necessary by "Unforeseen Natural Phenomena"	

1. Definition of "Unforeseen Natural Phenomena"

Emergency Works are designed to repair those damages to the roads under contract which are caused directly by unforeseen natural phenomena with imponderable consequences occurring either in the area of the roads or elsewhere, but with a direct impact on the roads. "Unforeseen Natural Phenomena" are defined as follows: [indicate the type of phenomena and thresholds values]

[Note: "Unforeseen Natural Phenomena" are normally defined as (i) rainfalls and winds of an extraordinary intensity and/or duration, (ii) major landslides which have their origin outside the right-of-way of the road, (iii) floods during which water levels rise above a certain maximum, (iv) earthquakes above a certain intensity, etc. The definition of those phenomena and events is necessarily country-specific, and even specific for different areas within one country. They must be specified in such a way as to exclude "normal" damages, such as trees falling on the road, minor erosions of the road and embankments, and damages caused by traffic accidents; those must be remedied by the Contractor as a part of his normal obligations under the contract.]

Without being limitative, the following is a list of damages requiring Emergency Works:[Indicate list.]

[Note: Examples of how eligible damages can be defined are: (i) complete destruction of a culvert as a result of exceptional rainfall quantities, which lead to an interruption of road traffic, (ii) interruption of a road following washouts equivalent of more than 100 (one hundred) cubic meter of material on a road section of 500 meters length, (iii) submersion of the road along more than 100 meters, provided that the submersion is not the result of deficiencies in the drainage system or of insufficient maintenance of drainage structures, etc.]

2. Procedure for Requesting Emergency Works

If damages clearly caused by "Unforeseen Natural Phenomena" result in a reduction of Service Levels below the normal threshold values specified in this contract, the Contractor may make a formal request to the Project Manager to carry out Emergency Works designed specifically to remedy those damages. If the Contractor decides to make a request for Emergency Works, he must (i) immediately inform the Project Manager of his intention to do so, by telephone, radio or other means, (ii) document the circumstances of the Force Majeure event and the damages caused, through

photographs, video and other suitable means, (iii) prepare a written request, stating the type of works he intends to carry out, their exact location and the estimated quantities and costs, including photographic documentation. In any case, a request for Emergency Works must be made immediately after the Contractor gains knowledge of the existence of damages caused by "Unforeseen Natural Phenomena".

The Project Manager, upon receipt of the request and not later than 24 hours thereafter, will evaluate the request made by the Contractor based on a site visit, and issue an order to carry out the Emergency Works. The order will specify the type of works, their estimated quantities, the remuneration to be paid to the Contractor, and the time allowed for their execution. The order may indicate a requirement for an engineering/geotechnical assessment of the options for the permanent repairs to the site.

3. Remuneration of Emergency Works

Emergency works are remunerated by the Employer on a lump sum for each work order established on the basis of estimated quantities, the unit prices being stated in the Bill of Quantities, and in accordance with the relevant clauses of the GC. The work items and the unit prices to be applied are specified in Section IV (Bidding Forms - Bills of Quantities) of this bidding document.

[Note: The unit price table for Emergency Works must be provided in the relevant Bill of Quantities of the bidding document, and shall list (i) the types of works which are likely to occur under emergency and (ii) hypothetical quantities for those works. The bidders then give their prices as part of their bid. As an alternative the Employer can define the rates that will be used to recompense the Contractor. If this option is selected the unit prices are not subject to bidding and should be established during the preparation of the bidding document, by calculating the average prices of several recent contracts in areas presenting similar conditions as the roads under contract.]

4. Provision for Emergency Works

The total contract amount will include a Lump Sum for provisional quantities of Emergency Works during the contract period, in accordance with the bidding data. The actual payments for emergency work will be based on the tendered rates.

[Note: The Provisional Sum is a percentage of the sum of all other price components of the contract. The percentage may vary widely from one contract to another, depending on the particular conditions of the area in which the roads under contract are located. It is probably higher for mountain roads than for roads in flat areas, but there are many other factors which may play a role. As a rule of thumb, the provision may be estimated somewhere between 5 and 25 percent of the total contract amount.]

5. Obligations of Contractor during Emergencies and Emergency Works

Given the nature of this contract and the fact that Emergency Works are remunerated separately, the Contractor will, during the execution of Emergency Works, continue to be responsible for assuring the normal Service Levels on all roads included in the contract. In particular, the Contractor will do everything reasonably possible in order to ensure the normal use of all the roads under contract, including the sections affected by emergencies.

If road traffic has been interrupted because of an emergency, the Contractor will take the measures necessary (i) to reopen the road to traffic in the shortest time possible, and (ii) maintain the road open during emergency works, without being entitled to a specific compensation for those measures. This is valid specifically for trees or other objects which may have fallen on the road, damage to access ramps to bridges, erosion of embankments, collapse of slopes, traffic accidents, flooding, etc.

6. Minor repairs made necessary by "Unforeseen Natural Phenomena"

If the works necessary to remedy damages caused by an "Unforeseen Natural Phenomena" are below certain threshold values, the Contractor will carry out those works as part of his normal obligations and without having the right to invoke the provision of the contract concerning emergencies and the remuneration of emergency works. In these cases the consent of the Project Manager is not needed and the Contractor will simply carry out the works on his own initiative. He will nevertheless inform the Project Manager of the damages occurred and the remedial measures taken.

The threshold values for minor repairs are as shown in the table below: [insert table]

[Note: Below is a sample table which may need to be adapted to the specific circumstances of the roads under contract]

Activity	Unit	Quantity per emergency event
Slides of material onto road	M^3	200
Culverts	Number	1
Asphalt concrete	M^3	20
Base course	M^3	50
Concrete	M^3	5
Embankment	M^3	200