

Himachal Pradesh State Road Transformation Program (HPSRTP)

Terms of Reference

For

Hiring of an “Environmental and Social Impact Assessment Consultant” (ESIA) for conducting an Environmental and Social Assessment of 2000km core network and preparation of Environmental and Social impacts mitigation/management instruments for World Bank financed ‘Himachal Pradesh State Road Transformation Program’.

Project Background

Himachal Pradesh is known as being the most prosperous and fastest growing economy in India due to initiatives taken in the field of education, horticulture, health, social welfare and inclusive growth. Tourism and agriculture are the main drivers of the economic growth in the State. Road remains to be the main mode of transportation, since rail and air transportation services are not well-developed. HP has 34,710 km of roads consisting of 4,352 km of national highways, 2,006 km of major district roads (the State Core Roads Network) and 28,352 km rural roads.

HPSRP-II is an ambitious project of the Govt. of Himachal Pradesh under which it intends to strategically transform the Core Road Network of 2000 km road length. In the project, State Road Network roads of 650 km road length will be widened, and 1350 km road length will be provided periodic maintenance besides other institutional, development activities. The key interventions proposed under HPSRTP is summarised in table 1.

Table 1: Summary of Interventions in HPRSTP

S.No	Descriptions	Road Length (km)
1	Feasibility study	2000
2	Detailed Project Report ó Widening/up-gradation	
a.	Tranche ó I	128
b.	Tranche ó II & III	522
c.	Total	650
3	Periodic Maintenance of road by Long Term Performance Base Maintenance Contract (LTPBMC)	1350
4	Survey and Investigation of Bridges (within the 1350 km)	
5	Road Safety Audit/Corridors	200
6	Black Spot Identification and Countermeasures	1150

Multiphase Programmatic Approach is being followed in the project. Up-gradation of 650 km road length will be carried out in 3 Tranches (i.e. Tranche-I=128km, Tranche-II=222 km, Tranche-III=300 km). The Department of Economic Affairs (DEA) and The World Bank (WB) has accorded in-principle approval of Tranche-I of HPSRTP for US\$ 110 million (loan assistance of US\$ 82 million and State Share of US\$ 28 million), under which State Road Network roads measuring 128 km length will be upgraded along with certain other institutional development activities. List of roads under Tranche-I are indicated in Table 2. The remaining length of roads (i.e. Tranche-II, Tranche-III, 1350 km maintenance component) will be finalized and supplied progressively i.e. on 90% delivery of milestones of each Tranche.

Table 2: Proposed List of Roads prioritized under Tranche-I of HPSRTP

(Sanctioned length -128 km)

Sr. No.	Name of Road	District	Road Length proposed in HPSRTP (km)	Average Acquired Width (m)
1	Barotiwala Baddi Sai Ramshahar	Solan	44.95	7- 9
2	Dadhol Ladrour	Bilaspur	14.500	7-10
3	Raghunathpura-Mandi-Harpura-Bharari	Bilaspur	3.500	10-12
4	Mandi Rewalsar Kalkhar	Mandi	28	10 -14
5	Nore óWazir-bowli	Kullu	37.0	7-9
Total			127.95	

As part of the project preparation, environmental and social assessments (ESA) of proposed roads under the Project will be carried out in accordance with the World Bank's new Environmental and Social Framework (applicable from October 1, 2018) and applicable GOI/GoHP's social and environmental requirements.

2.0 Objective

The objectives of this assignment are to prepare a). Environmental and Social Impact Assessment and preparation of E&S risks and impacts management tools for priority 128km road identified for Tranche-I and 522km road of Tranche II and III; b) Resettlement Policy Framework and Indigenous (or Tribal) Peoples Policy Framework (TPPF) and Social Management Framework for the overall project; c) Stakeholder Engagement Plan; d) Provide inputs to the Borrower's Environmental and Social Commitment Plan (ESCP); e) Environmental & Social Screening of the 2000 km candidate roads. The ESIA will be conducted in accordance to Environment and Social Standard ESS1: Assessment and Management of Environmental and Social Risks and Impacts, and will consider, in an integrated way, all relevant direct, indirect and cumulative environmental and social risks and impacts of the project, including those specially identified according to the ESS to-10 standards.

3.0 Scope of Work

In line with the requirements of the World Bank's ESF, HPPWD/HPRIDC now wishes to engage a Consulting Firm (hereafter named "the Consultant") for the preparation of an environmental and social assessment and preparation of management instruments to address project's E&S risks and impacts for roads in propose Himachal Pradesh State Road Transformation Program (HPSRTP). The scope of work to be carried out by the Consultant shall include but not limited to the following:

- Conduct detail Environmental and Social Impact Assessment (ESIA) for selection of 650km of up-gradation with the priority of 128 km and 1350km of maintenance roads in accordance with Bank's new ESF. While conducting ESIA, the Consultant will coordinate with DPR Consultant to ensure integration of ESA findings in engineering feasibility studies. In addition the Consultant will prepare as necessary any Environmental and Social Management Plan (ESMP), Biodiversity Management Plan (BMP), Resettlement Policy Framework (RPF), Resettlement Action Plan (RAP), Tribal (Indigenous) Peoples Policy Framework (TPPF), Indigenous People Development Plan (IPDP), Labor Management Procedure and Stakeholder Engagement Plan (SEP) etc as appropriate for the activities corresponding to tranche 1 of this multiphase programmatic engagement as indicated in Table 1.
- Conduct, as the first step, for the entire 2000 km a comprehensive Environmental and Social Screening.
- Support the client in complying with requirements such as preparation of application and supplementary reports (survey and preparation) required as per local regulatory requirements for obtaining project's clearances like forest /environmental/wildlife clearances, if applicable, and presentation before expert panel committees of MoEF&CC, Govt. of India.

- d) Develop a coordination mechanism to ensure timely sharing/exchange of information and documents with Feasibility and DPR Consultant. The Consultant shall ensure DPR Consultant integrate recommendations on environmental and social mitigation measures in design, working drawings, developing specifications, estimates of quantity and ESMP budget; and linking quantity and management measures in bid document.
- e) Support the client in developing Stakeholder Engagement Plan (SEP) for entire project cycle and its disclosure before project appraisal. The Consultant shall conduct consultations with identified stakeholders and project-affected parties/community from early project planning and design stages of the assignment.
- f) Support the client in helping HPRIDC develop by Project Appraisal an Environment and Social Commitment Plan (ESCP) for agreement with the World Bank. The ESCP will provide according to a specific timeframe (a) a list of management plans, based on ESA/ESIA findings that borrower will develop and implement, (b) the appropriate plans and actions required for the project to meet ESSs requirements, (c) adaptive management process for changes in project scope and unforeseen circumstances, and (d) include targets and performance indicators for borrower's monitoring.
- g) Conduct capacity building training on Bank's new Environmental and Social Framework (ESF), Environmental and Social Management Plan, and aspects like slope stabilization and erosion control; efficient use of raw materials i.e. use of local materials, recycled aggregates; climate resilient measures; water conservation and management, GHG reduction, emergency preparedness etc. which are integral part of Bank's ESF policy.

4.0 Detailed Scope of Work

Task A: Activities to be undertaken during Inception Stage

- a) The Consultant shall use the inception period to familiarize with the project details. The Consultant shall be cognizant of engineering studies being prepared in parallel. The Consultant should also recognize that due care and diligence planning during the inception stage helps in improving the timing and quality of the ESIA reports.
- b) During the inception period the Consultant shall (a) study the project information to appreciate the context within which the ESIA should be carried-out, (b) identify the sources of secondary information on the project and on the project area, (c) conduct preliminary planning survey to understand environment settings, available ROW and required ROW along roads and road corridors, identify parameters for E&S screening, design and developing formats for field and design survey; (d) prepare preliminary estimation of impacts on private and community properties including impacts on non-titleholders (e) carry out identification of stakeholders, plan consultations with stakeholders and likely project affected parties; and (e) study the various available surveys, techniques, models and software in order to determine the most appropriate options in the context of the project.
- c) The Consultant shall review and identify Borrower's E&S rules/regulations to identify required actions considered necessary for the project to achieve compliance with local legal requirements, insofar as they do not contradict the Bank ESF Policy;
- d) The Himachal Pradesh State Road Project, preceding to HPSRTP, has implemented measures to minimize the impacts of project on overall environment by undertaking interventions like design modification and adoption of innovative technologies with objectives to create a sustainable road. The interventions intended to enhance, but not limited to, road safety, slope stabilization, erosion control, biodiversity conservation measures, aesthetic of landscape etc. The Consultant shall review reports of Himachal Pradesh State Road Project (HPSRP), and will assess applicability of

identified good engineering practices in the project and adopt during design of HPSRTP. The Consultant will summarize the lessons learnt from the previous project.

- e) The Consultant after appreciation of consultancy assignment scope and site conditions, shall fine-tune the methodology(ies) that shall be used for carrying out Environmental and Social Impact Assessment (ESIA) for tranche-I roads and interventions propose (Table-1) under HPSRTP. The deliverables are required by appraisal of the project.
- f) The Consultant shall interact with the Feasibility and DPR Consultant to determine how the ESIA activities fits into the overall project preparation/ project cycle; and to appropriately plan the timing of the deliverables of the ESIA process. The Consultant shall develop criteria for prioritization of road corridor and for selecting appropriate ESIA instrument (s) for subsequent stage of project preparation. In addition, a mechanism for continuous interaction between the engineering, environmental and social teams shall be formalized and succinctly documented in the Inception Report.

Task B: Undertaking Environmental & Social Screening for 2000km core road network as part of Feasibility study and prioritization of road

Environment screening is done in the early stages of the project preparation to make preliminary assessment and review of the social and environment issues that are relevant to the proposed project. It determines the appropriate extent and type of project ESMP to be undertaken, provides information/input that are required for assessing technical, economic and financial feasibility of the project, and recommends possible modifications in the preliminary project design. The Consultant shall carry out social and environmental screening as per the work plan and methods described in the Inception Report, and in consideration of the comments of the Client and the Bank on the same. The Consultant shall keep in mind the particular requirements of the project, especially the needs of the overall feasibility studies in carrying out the screening. The environmental surveys be co-ordinated with the social and engineering surveys, as far as practical. **The social and environmental screening of the identified 128 km will be conducted as the first priority.**

a) Define project’s ‘study area’ or project influence area

The Consultant shall define the study area¹ considering different environmental settings along corridor, project activities and associated facilities¹. Specify the boundaries of the study area for the assessment: watersheds, enhanced access to sensitive/remote areas such as parks/reserves/forests, in-migration and settlement, natural resource exploitation and commercial development.

b) Surveys

The Consultant shall collect information on the existing environment scenario from authentic secondary sources, and identify gaps to be filled, relevant to the environmental screening needs from primary surveys. Primary surveys shall include baseline monitoring of air, water, soil, noise and vibration at representative and sensitive locations, and identification of all macro-level environmental issues within the project’s study area. The Consultant shall extensively use the video records of the project road (carried out as part of the engineering surveys).

The Consultant shall survey the environmentally sensitive locations on and along the project road, as well as within the project’s study area. All regionally or nationally recognised environmental resources and features within the project’s study area shall be clearly identified, and studies in relation to the proposed scope of the project. Typically, these will include stretches of roadside trees; environmental and common property resources such as forests, water bodies; land use types; archaeological sites and major physical cultural properties. All these parameters for impact

¹ Refer ESF, 2016 of the World Bank

assessments shall be depicted using on a strip map along the chainage. The information of longitude, latitude should be recorded.

c) Review of Environmental Legal Requirements

Taking cognizance of existing state and national environmental acts, rules and regulations, the Consultant shall review environmental and social legal requirements set forth per local regulations to assess their applicability to the project. The permissions and clearances required shall be listed beforehand for implementation of the project.

d) Baseline Data

The Consultant while planning baseline data collection shall ensure (a) relevance of baseline data to predict impact and design mitigation measures; (b) identify data gaps and uncertainties associated with prediction; (c) based on current information, assess the scope of the area to be studied based on physical, biological, and socioeconomic conditions; (d) takes into account current and proposed development activities within the project area but not directly connected to the project. (This section should indicate the accuracy, reliability and sources of the data and consequences for assessing impacts and their mitigation). This section will address the separate Project influence Area (PIA) of each of the route under assignment (i) and will present GIS map, as appropriate.

e) Analysis of Impacts and Management Measures

The Consultant shall conduct a preliminary analysis of the nature, scale and magnitude of the impacts that the project is likely to cause on the environment, especially on the identified sensitive environmental receptors, and classify the same using established methods and tools. For the negative impacts identified, alternative avoidance/mitigation/management options shall be examined (in line with mitigation hierarchy), and the most appropriate ones suggested. For the positive measures identified, alternative and preferred enhancement measures shall be proposed.

f) Scoping

The Consultant shall define boundaries of the project ESIA after careful consideration of the baseline scenario, likely potential environmental risks and impacts on the identified sensitive environmental receptors/VECs, and the proposed mitigation and enhancement measures. The scoping shall include a listing of potential environment issues that do not deserve a detailed examination in the project ESIA (covering induced impacts that may be outside the purview of the client) along with a justification. The scoping needs to identify potential environmental risks and impacts that should be studied during ESIA and recommend additional studies needed to comply the requirements of Environmental and Social Standards (ESSs) of the World Bank. If extensive study is recommended in future which is beyond the scope of the project, the draft ToR should be attached in the Annex.

g) Environmental inputs to Engineering Feasibility Studies

The Consultant shall make location-specific design recommendations, wherever possible or required related to alignment (major/minor shifts or bypass or altogether different route alternative), road cross-sections, construction material use, slope stabilisation, erosion control, and mitigation & enhancement measures. For all the different alternative improvement proposals under consideration, using acceptable/established valuation techniques, the Consultant shall prepare {a} an estimate of economic costs of the environment damages, and economic benefits from the direct positive impacts that the project is likely to cause, and {b} an estimate of financial cost on the mitigation and enhancement measures that the project is likely to require, and financial benefits, if any.

The Consultant shall consult with the engineering team and familiarize themselves with the project's overall feasibility analyses models, so that the ESIA inputs are in conformity to the needs of the overall feasibility study. In addition, wherever economic and financial costs of the environmental

impacts cannot be satisfactorily estimated, or in the cases of significant irreversible environmental impacts, the Consultant shall make recommendations to avoid generating such impacts.

h) Stakeholder Assessment & Consultation

The Consultant shall develop Stakeholder Engagement Plan that shall be applicable throughout the project cycle. In preparing this plan, the Consultant shall carry out consultations with communities that are likely to be affected, NGOs, selected Government Agencies and other stakeholders to (a) collect baseline information, (b) obtain a better understanding of the potential risks and impacts and (c) appreciate the perspectives/concerns of the stakeholders. Consultations shall be preceded by a systematic stakeholder analysis, which would (a) identify the individual or stakeholder groups relevant to the project and to environmental issues including affected parties, other interested parties, disadvantaged/vulnerables or groups (b) include expert opinion and inputs, (c) determine the nature and scope of consultation with each type of stakeholders, (d) determine the tools to be used in contacting and consulting each type of the relevant stakeholders (e) mode of consultation and time of consultation (f) management functions and responsibilities (g) monitoring and reporting. Consultation with the stakeholders shall not be treated as a project information dissemination session, but be used to improve the plan and design of the project and shall continue through project implementation. The Stakeholder Engagement Plan shall specify what is required for information disclosure and to achieve meaningful consultation. The plan will be such that it shall ensure appropriate project information is disclosed to stakeholders in a timely understandable, accessible and appropriate manner². The plan for continued consultation to be conducted during implementation stage of the project shall also be appended.

Deliverables 1: The Consultant shall prepare an Environmental Screening Report. The reports will be revised in consideration of the comments of the Client and the World Bank.

Deliverables 2: The Consultant shall prepare a Draft Stakeholder Engagement Plan. The report will be revised in consideration of the comments of the Client and the World Bank.

Task C: Undertaking ESIA and Preparation of Corridor Specific Environmental Management Plan for 650km of up-gradation road

The outcomes of environmental screening shall be an objective evaluation of project corridors and fit in to overall criteria for selection of project corridors (technical, environmental, social and economic criteria) and the outputs shall provide: (a) exclusion of project corridors i.e. consistent with ESSs criteria; (b) specific environmental criteria for prioritization of project corridors; (c) scope of corridor specific ESIA including stakeholder engagement and consultation to be undertaken based on project's potential risks and impacts; (d) identification of associated facilities and primary supplier of project that need to be assessed in detail during ESIA; (e) identify scope for integrating green highway concepts (use of local materials, recycled aggregates, use of innovative materials, creating carbon sink, soil and water conservation (managing watershed of river/stream & water harvesting), climate resilient measures etc. as suited to local needs and challenges; (f) set out project boundary and identify project activities for GHG emission estimation; (g) applicability of Environmental and Social standards (ESSs 2-8) and scope for assessment during ESIA. Further, the scoping shall identify issues that need to be studied in detail - related to sensitive receptors / land uses that could be affected due to road improvements with a view to integrate appropriate measures in the designs.

² refer to WB site for template on preparing SEP at <http://pubdocs.worldbank.org/en/909361530209278896/ESF-Template-ESS10-SEP-June-2018.pdf>

Based on the screening, the Consultant shall determine the scale and type of surveys that will be conducted as part of ESIA. The intent of surveys shall be to: (a) validate secondary data with latest baseline information; (b) facilitates the design and integration of appropriate management / mitigation measures; (c) comply with the regulatory requirements and to facilitate GoHP/GOI (as applicable) to process relevant environmental clearances.

a. Legal and Institutional Framework

The Consultant shall review and assess applicability of existing national and state Environmental and social requirement according to applicable policy, laws, regulations, rules and procedures; as well as the institutional framework relevant to environmental and social aspects. The assessment will identify inconsistency or lack of clarity and aspects relevant to address project E&S risks and impacts; and deviations with respect to requirements in ESSs. Based on assessment findings, the Consultant in discussion with HPRIDC/HPPWD shall suggest actions to address E&S risks and impacts that may be implemented during project preparation and implementation. The Consultant based shall assist the client in preparing application and supplementary reports for obtaining requisite clearances or permits.

b. Baseline Surveys:

The Consultant will {a} collect information from secondary sources that are relevant to understand the baseline, as well as the design of mitigation measures pertaining to physical, biological and socio-cultural environments; {b} carry out site visits and identify environmentally sensitive features locations within direct or indirect project area and document them on the base maps to identify conflict points with preliminary designs (including verification of these from authentic sources of information, such as from the revenue and forest records); and {c} prepare detailed specific maps showing details of candidate sites with opportunities to enhance positive impacts of project.

All surveys shall be carried out in compliance with the GoHP, GoI standards/guidelines/norms. Wherever such guidelines/norms are not available, the techniques, tools and samples employed for the surveys shall conform to the International practices. Whenever directly relevant secondary data is available, these should be used, while indirectly relevant data should be verified through primary survey. Environmental quality (air, water, noise and vibration) monitoring shall include an adequate number of samples, as established on a sampling network to provide a representative picture of pollution levels along all the road corridor. Additional data for sensitive environmental / ecological receptors, if any, shall be collected such as to analyze and predict the possible risks and impacts to a degree and precision of acceptable standards. The surveys shall necessarily cover inventory of trees, streams/rivers, historical/cultural sites, construction material sources, settlements, land use, sensitive receptors etc. in project corridors, including preparation of tree cutting schedules and forest land diversion case. Further, additional specialized surveys, such as biodiversity assessment survey, and hydrological surveys shall be conducted, if and when required as part of environmental scoping.

The Consultant shall collect information on all regionally or nationally recognized environmental resources and features within the project area, which shall be clearly identified and studied in relation to activities proposed under the project. These will include all protected areas (national parks, wildlife sanctuaries, reserved forests, biosphere reserves, wilderness zones), unprotected and community forests and forest patches, all wetlands, rivers, rivulets and other surface water bodies.

The Consultant shall consolidate all these information on maps of adequate scale (1:250,000 minimum), superimposed with the projects roads corridor.

c. Environmental and Social Risk and Impacts and Mitigation Measures:

The Consultant shall determine all relevant direct, indirect and cumulative environmental and social risks and impacts of the project related to key issues identified through the scoping, such as, but not

limited to (a) construction impacts such water and soil contamination from wastewater generated from construction/workers camps; spillage and handlings of chemical and hazardous materials; damage to vegetation; potential inducement of landslides, landslips, erosion from cut faces of hill slopes; disposal of spoils from hill cutting and tunnelling; air pollution due to fugitive dust from hill cutting and earthwork, and emission from operation of vehicle, equipment and plants; cutting of trees for widening of road; reduction of natural resources base and degradation due to extraction/quarrying; land degradation from project induced development; change in aesthetic of landscape; impacts on archaeological and historical sites/assets, culturally and socially important common properties, religious properties/sites, sacred groves on or near the project roads; distress of public/community due disruption of utility services; and likely direct, indirect and induced impacts on ecological functions of forests, other natural habitats including protected areas; community health and safety risks and issues; (b) occupational health and safety risks and issues during construction and operation; (c) operation stage safety concerns and risks, considering increased speed and traffic volumes and community/ pedestrian safety issues; (d) environmental impacts during operational e.g. air pollution, noise, traffic safety, and impacts on wildlife, etc.

The Consultant shall (a) identify feasible measures for resource efficiency i.e. energy use, water usage and management, and raw materials so as to minimize project's foot prints on finite natural resources; (b) estimate carbon and GHG emissions due to implementation of project, identify feasible measures for reducing such emissions, creating carbon sink, and climate resilient measures to suite local needs and challenges, and by possible use of alternative technologies. The Consultant shall be responsible to validate project boundary, baseline data, tools and methods that shall be used for estimating GHG emission and designing mitigation measures.

The Consultant for identified environmental risks and impacts shall prepare Environmental and Social Management Plan, in accordance to mitigation hierarchy which will (a) identify the set of responses to potentially adverse impacts; (b) determine requirements for ensuring that those responses are made effectively and in a timely manner; and (c) describe the means for meeting those requirements.

Cumulative Impact Assessment of the proposed project activities, and of the induced effects due to construction and operational activities of the project along with other actual or planned development activities in the project area. For this analysis, the Consultant will identify Valued Environmental Components specifically relevant to the Cumulative Impact Assessment based on inputs from stakeholders, and will assess the potential impacts of multiple development activities on the VECs.

d. Analysis of Alternatives

The Consultant while doing analysis of alternatives shall compares feasible alternatives to the proposed project site, technology, design, and operation including environmental and social risks and impacts with project and without project scenarios. The Consultant shall quantify and provide estimated budget for the alternative mitigation measures; and suggest institutional, training and monitoring requirements for implementation.

The Consultant shall suggest on efficient use of environment friendly construction materials and technologies, energy and resource efficiency, water conservation and management, reduction of GHG emission and increasing carbon sink, climate resilient measures etc. The Consultant to the extent possible shall attaches economic values where feasible.

The Consultant need to suggest nature based options (if available) to minimize the geohazards/enhancing slope stability due to the road construction during construction and operation period.

e. **Environment and Social Management Plan**

- Based on the environmental and social impacts assessed, ESMPs separate for each road corridors shall be prepared consists of set of mitigation, monitoring, and institutional measures required to eliminate adverse environmental and social risks and impacts. The ESMP shall be prepared as per the requirements of WBø ESSs and should identify responses to potentially adverse impacts; determine requirements for ensuring timely responses; and describe the means for meeting those requirements. The technical details for each mitigation measure shall include the type of impact to which it relates, the conditions under which it is required (e.g., continuously or in the event of contingencies), as well as preliminary design, equipment descriptions, and operating procedures, as appropriate.
- Estimate the impacts and costs of the mitigation measures for each of the activities separately and of the institutional and training requirements to implement them. Assess compensation to affected parties for impacts that cannot be mitigated. However, this assessment and subsequent compensation plan are more strongly addressed in the Social Impact Assessment (SIA) document.
- The Consultant shall recommend feasible and cost-effective measures to prevent or reduce significant negative impacts to acceptable levels. Apart from mitigation of the potential adverse impacts on the environmental component, the ESMP shall identify opportunities that exist to induce positive impacts of project along the corridor. This shall include but not limited to the enhancement of specific locations as water bodies; micro-watershed; innovative storm water management practices - like rain water harvesting and bio-retention apart from preventing water logging conditions in the adjoining settlements of the highway; enhancement of scenic areas along the corridor; enhancement of community and cultural assets, etc. Residual impacts from the environmental measures shall also be clearly identified. Include measures for emergency response to accidental events (land slide during construction or operation.), as appropriate
- The ESMP shall include specific or sample plans, such as for management and redevelopment of quarries, borrow areas and construction camps. The ESMP shall include detailed specification, bill of quantities, execution drawings and contracting procedures for execution of the environmental mitigation and enhancement measures suggested, separate for pre-construction, construction and operation period. In addition, the ESMP shall include good practice guides, relates to construction and upkeep of plant and machinery.
- Responsibilities for execution and supervision of each of the mitigation and enhancement measures shall be specified in the ESMP.
- To monitor implementation of ESMP, for different stage of project (pre-construction, construction, post construction), the Consultant shall identify the performance indicators, approach of monitoring, and frequency. The performance indicators should include both quantitative and qualitative types, but the Consultant shall consider practicality aspect and provide approach for monitoring each identified indicator.
- The Consultant for unanticipated incidents arising from both natural and man-made hazards, shall prepare Emergency Response Plan (ERP) particularly during construction stage.
- The Consultant shall also prepare a detailed management plans with specific actions to be taken by the contractors and sub-contractors with regard to working conditions and management of workers, management of chemical, hazardous and non-hazardous material/waste, noise, occupational health and safety of workers and community, labor influx (workers accommodation, HIV/ AIDS prevention etc.) and other key impacts under contractorsøcontrol.
- The ESMP shall specify the environmental supervision, monitoring and auditing requirements. The monitoring program shall specify performance indicators, monitoring parameters (air, water, noise, soil and vibration), reference standards, monitoring method, frequency, duration, location, and reporting on progress and results of mitigation. In addition, the program will specify what action should be taken and by whom in the event that the proposed mitigation measures fail, either partially or totally, to achieve the level of environmental protection expected. An outline of the contents of the EMP to be included in

the project's Operational Manual should be provided along with environmental/social protection clauses for contracts and specifications.

- The EIA shall highlight the special environmental clauses (SECs) to be included in the Tender Document under General/Particular Specification. These clauses are aimed at ensuring that the Contractor carries out his responsibility of implementing the EMP and other environmental and safety measures. The EIA shall also include a health safety plan of the project to be included in the tender document.
- The Consultant shall provide assessment on existing institutional/organizational status to support timely and effective of environmental and social project components. The findings shall be basis to identify measures and actions to strengthen environmental and social management capability in HPRIDC/HPPWD. The ESMPs shall describe the implementation arrangement needed for the project, especially the capacity building proposals including the staffing of the environment unit adequate to implement the environmental mitigation and enhancement measures. For each staff position recommended to be created, detailed job responsibilities shall be defined. Equipment and resources required for the environment unit, training plan and modules shall be specified, and bill of quantities prepared. All key actions identified essential for capacity development for effective implementation of project's E&S mitigation measures shall be linked with ESCP.
- The Consultant in the ESMP shall provide implementation schedule for measures that must be carried out as part of the project, showing phasing and coordination with overall project implementation plans; and estimated cost and sources of funds for implementing the ESMP (integrated into the total project cost tables).
- The ESMP prepared will shall be incorporated into the ESCP. The Consultant shall ensure implementation costs of mitigation measures and actions is integrated into the project's overall planning, design, budget, and implementation.
Develop the Labor Management Procedures. Estimate the total number of workers including contracted and migrant workers, the skill requirement and timing and the associated risks and the facilities to be provided as per the World Bank Group occupational health and safety requirements.

f. **Stakeholder Engagement**

The Consultant will update the nature/type, scope and frequency of stakeholder engagement required in the SEP proportionate to environmental and social risks and impacts identified during E&S screening. The Consultant will conduct stakeholder engagement during ESIA preparation as per updated SEP. The feedbacks received shall be analysed, and the Consultant shall determine how these can be addressed in the final ESIA and project designs. It is recommended that consultation sessions shall be organized in co-ordination with the Feasibility and DPR Consultant. The ESIA will include the planning of the stakeholder engagement during the project implementation.

Deliverables 3: ESIA of 650 km road upgradation (128kmpriority out reach)

Deliverables 4. Labor Management Procedure

Task D: ESIA and Preparation of Environmental Social Management Plan for 1350km of LTPBMC, road safety audit and black spot improvement

The scope of ESIA for these project interventions will be determine from outcome of Environmental Screening. The Consultant while carrying out ESIA shall adhere to steps outline under Task C.

In case of Long term performance based maintenance contract, the ESMP, in addition to content outlined under Task C, the Consultant based on identified potential environmental impacts shall determine various environmental performance indicators, a part of Monitoring & Evaluation Framework, to assess the implementation stage compliance of the contractor with provisions in ESMP. The Consultant while designing the M&E framework should also bring out and suggest

practicable corrective measures to remediate any non-compliance in the project. The Consultant shall ensure integration of identified performance indicators and corrective measures in the bid document, along with design drawings, specification, BoQ, and budget for environmental mitigation and enhancement measures. The Consultant will include Environmental Code of Practice in the case of possible but unidentified impacts.

Deliverables 5: ESIA for the 1350 km of LTPBMC, road safety audit and black spot improvement

Task E: Public Disclosure

The Consultant will prepare a plan for in-country disclosure, specifying the timing and locations; translate the key documents, such as the executive summary of Environmental and Social Impact Assessment, Environmental and Social Management Plan or any other documents in local language and draft advertisement for the newspaper announcements for disclosure; and help the client to place all the related Environmental and Social Impact Assessment reports on the client's website. The draft ESIA should also be available in a public place accessible to affected groups and local NGOs.

Relevant materials will be provided to affected groups in a timely manner prior to consultation and in a form and language that is understandable and accessible to the groups being consulted. The Consultant should maintain a record of the public consultation and the records should indicate: means other than consultations) eg, surveys) used to seek the views of affected stakeholders; the date and location of the consultation meetings, a list of the attendees and their affiliation and contact address; a video of the national consultation workshop and summary minutes.

Task F: Provide inputs to preparation of ESCP

The Consultant shall provide inputs to HPRIDC in preparation of an ESCP which will include (a) measures and actions required for the project to achieve compliance with the ESSs over specified timeframe for the road construction and maintenance, (b) process (reporting and managing) allowing adaptive management of propose project changes or unforeseen circumstances, (c) different management tools that borrower will develop proportionate to the risk and impacts of the project.

Deliverables 5: Provision of inputs to preparation of Environmental and Social Commitment Plan.

Task G: Other Assistance to the Client

The Consultant shall support the client to furnish any relevant information required for obtaining clearance from various state and central government agencies. This may include {a} assisting the client in the submission of application for the Clearance of Reserved or Protected Forests to the State Forest Department, which shall include marking boundary pillar of proposed right-of-way, conduct tree counting survey and its enumeration, preparation of forest land diversion map and delineate its boundary by conducting DGPS survey, coordinate verification of trees for cutting and forest area to be acquired, presentation of case before MoEF & CC, preparation of forest diversion proposal, coordination and follow-up with forest departments till obtaining FC approvals; {b} completion and submission of the MoEF&CC questionnaire for Environmental Appraisal for the project, if applicable; {c} assistance in presentation to the Wildlife Board of the MoEF&CC in obtaining clearance for any section or road passing through the Wildlife Reserves or Sanctuaries or other protected areas, if any; {d} assistance in submission for any other clearance requirements with respect to the environmental components relevant to the project; {e} to prepare presentation, brochures, pamphlets for any kind of

stakeholder consultation and disclosure; {f} consultation with WB Mission as and when required upon instruction of client; {g} to attend all progress review meetings with Team Leader as and when called by the client as well as to prepare progress review reports.

Task H: Training of Client's Staff

The Consultant shall conduct training for the client at various levels. The training should as far as possible be conducted in the HPRIDC office at Shimla. This is to ensure that the knowledge, skills and perspectives gained by the Consultant is transferred to the client so that these can be utilized effectively during project implementation. The training should be focused (a) borrowers responsibilities and ESSs requirements of the World Bank and (b) on ESMPs covering both central and field offices. The Consultant shall develop a plan for training the client's staff. The plan should specify the types of training, the participants for each training type, the number of sessions required, the duration of each session and when it should be conducted. At the end of the training, when the ESMPs are ready, brief reports shall be prepared for the training conducted and observations relevant for future training, if any.

Task I: Co-ordination with DPR Consultant:

The Consultant shall at the direction of HPRIDC ensure absolute coordination and shall include but not limited to the following as part of the scope of work:

- Coordination with Consultant hired for feasibility study and preparation of detailed design report.
- Provide assistance to HPRIDC as appropriate in preparation of the project;
- Develop mechanism to establish a strong co-ordination with the other project-preparation /management Consultant appointed in the project;
- Work under the overall supervision of HPRIDC will facilitate the consultancy in contacting relevant officials, departments and agencies;
- Ensure the timely flow/exchange of information and documents with DPR Consultant and stakeholders of the project;

5.0 Inputs to be provided by the Client

The Client shall provide all necessary and reasonable support to the Consultant to collect secondary data by issuing authorization letters. The Consultant will be responsible for any translation of documents and for processing of data. The Project Director or his representative will liaise with the Consultant for all activities and participate as possible in the study. The HPRIDC will provide the following reports:

- All relevant documents related to the specific projects and any other background documentation and studies, available with HPRIDC.
- Making all necessary arrangements for supporting the work of the Consultant(s), by e.g. facilitating access to government authorities and other project stakeholders and infrastructure facilities.

Tasks for Social Impact Assessment and Mitigation Plans

1. **Background:** The Social Impact Assessment (SIA) Study is an approach for incorporating social analyses and participatory processes into project design and implementation, which can enhance quality at entry. It lays the groundwork for projects that are more sustainable due to their enhanced positive impacts on local community SIA study through participatory planning has specific functions to assess the socio-economic issues, impacts on the project affected people (PAP) and on local

communities and which helps to design mitigation plans in order to improve their standard of life and a strategy for participatory implementation.

2. Scope of Work

2.1. The Consultant shall prepare Environment and Social Impact Assessment Report as per new ESF of World Bank and in compliance with the applicable national and state level legal requirements if not contradictory with WB ESF Policy.

- i. **Social Impact Assessment Report** shall identify potential impacts and required mitigation and also review and identify the applicable policies both National /State and WB. This shall be carried out throughout the length of the roads and on either side. Also, shall include the analysis and a consultation framework for the project. Adequate support data as part of Social Impact Assessment is needed for confirming the applicability of ESS 7.
- ii. **Resettlement Policy Framework** shall be prepared outlining the likely categories of impacts and mitigation measures including Entitlement Matrix for each category of impact like property, business, etc, Land, Resettlement & Rehabilitation measures. Also entitlement matrix enlightenment and awareness among PAPs, grievance redressal mechanism available for PAPs and transparent implementation mechanism on LA and R&R measures shall be clearly spelt out.
- iii. Tribal (Indigenous) Peoples Policy Framework (TPPF): A framework shall be prepared to: assess the nature and scope of direct and indirect impacts; provide a consultation strategy to ensure their participation in the project design and implementation; measures for avoidance of impacts and mitigation measures in case of impacts; circumstances requiring Free Prior and Informed Consent (FPIC) and grievance mechanism
- iv. **Prepare a Resettlement Action Plan (RAP) based on the SIA and finalized RPF** (see Annexure B and D for outline of RAP)
- v. Indigenous Peoples Development Plan: Prepare an IPDP as required based on findings of ESIA and approved Tribal (TPPF) (see Annexure D for outline of IPDP)

2.2 The Consultant is required to conduct all types of Census and Baseline Surveys, Household Surveys, effective consultations with the project affected people and local community, assessment for compensation for all types of assets incorporating all Resettlement & Rehabilitation (R&R) measures to arrive upon conclusions.

SIA and RAP

- a) Consultations with stakeholders: Conduct detailed consultations with each stakeholder category and present a Stakeholder Analysis of local stakeholders such as local government, associations, who could play a role in the project implementation process (including R&R) with positive/negative influence on the outcomes and also on issues related to Gender Based Violence (GBV) and GBV-related concerns about the project. Record and analyze people's perception of the project, its adverse impacts, and minimum acceptable mitigation measures (relocation options, if any are required assistance offered) that will enable them to cope with displacement or loss of livelihoods ó temporary or permanent in nature, if any. Hold separate focused group discussions (FGDs) with women and other disadvantaged and vulnerable individuals or groups (as identified from the study). Additionally, in case of tribals, conduct Free Prior Informed Consultations to ascertain if broad community consent for the project exists and in case FPIC cannot be ascertained, the project will not proceed with those sub-projects/activities. The same shall be recorded in the ESCP. Summarize the concerns, suggestions by stakeholder for consideration by project authorities during design.
- b) Environmental and Social Analysis of Alternatives: As the overall design options are in draft stage, the social analysis of alternatives shall follow the mitigation hierarchy in relation to siting, design including the "without project" situation

- c) Identification of Adverse (on the finalized alternative) and positive impacts of the project through consultations and quantitative survey: Survey should cover all categories of impacted persons and results of the Census and Socio-economic survey on affected households, segregated by gender and social category should be presented. Establishing impact categories is critical to the determination of potential adverse impacts is an analysis of the relative vulnerability of, and risks to, the affected communities. Analyse key impacts on different groups of people (such as land owners, small, farmers; small businesses, shopkeepers; commercial establishments, SCs/STs, women), and communities (common properties, lands). Segregate these impacts by pre-construction and construction stage (such as disruption, loss of access, loss of livelihood, debris disposal following hill cutting, impact on host community, if any, issues arising due to labour influx, etc.). Besides all the affected community assets such as worship place, drying up of drinking water source, impacts to schools and the community facilities need to be recorded. As some of the districts have presence of scheduled tribes, and if the Screening exercise indicates the need, the SIA needs to assess the current socio-cultural living style of the tribal communities in line with the World Bank's ESS 7 and ascertain required measures.
- d) Entitlement policy and assistance package: HPRIDC proposes to use Direct purchase /Negotiated award method for land taking under this project. During preparation, the approach would be further assessed to better understand the processes and also whether the method meets the requirements of ESS 5. Also, the gap analysis between this method and ESS5 requirements will cover the treatment of non-title holders, such as squatters and encroachers. Hence, based on discussions with GoHP and WB, establish the criteria for eligibility of compensation and other resettlement assistance and present entitlements by type of impacted assets and category of impacted persons. In the cases of very significant environmental and/or social losses or benefits, the Consultant shall prepare indicative economic/financial costs of environment and/or social damage and the economic/financial benefits the preliminary design options are likely to cause. In the cases, the impacts or benefits are not too significant, qualitative methods could be used.
- e) Identification of gender concerns: Carry out sub-project specific assessment of access, safety, benefits from increase in mobility, access to water points (often along the roads), fuel and fodder paths, etc shall help inform the projects through gender perspective, by holding separate FGDs with women households and road users. In addition explore areas for skill development/enhancement
- f) Identify modes for citizen engagement: As persons and communities would be impacted/influenced by the project activities, there would be a need to engage with citizen/communities in respect to design and mitigation measures, monitoring, grievance mechanisms
- g) Institutional Capacity Building & Training: Assess the role of the key institutions, departments, and stakeholders involved in the project and describe their roles, responsibilities and relationship with the project activities. Present an assessment of the implementing agency, specific to implementation of RAP/ARAP, IPDP. Provide an assessment of the strengths, weaknesses and opportunities for capacity enhancement to address social and gender issues. Prepare an indicative action plan by type of training, audience and frequency. The management plans shall describe the implementation arrangement needed for the project, especially the institutional capacity-building proposals, including the staffing of the environmental and social units (as and when recommended) adequate to implement the environmental and social mitigation and enhancement measures. For each staff position recommended, detailed job responsibilities shall be defined. Equipment and resources required for the environmental and social units shall be specified, and bill of quantities prepared. A training plan and schedule shall be prepared specifying the target groups for individual training program, the content and mode of training.
- h) Grievance Redressal Mechanism and procedures: Assess existing grievance redressal mechanisms (available for HPSRP I, road related grievance mechanisms and also for the state as a whole) including customer complaint mechanisms with different agencies and propose suitable redressal mechanisms/measures in discussion with HPRIDC.

- i) **Monitoring and Evaluation:** Propose mechanisms for Internal and External monitoring for monitoring of implementation of environmental and social mitigation instruments ó RAP/ARAP, ESMP and IPDP implementation and its periodic Evaluation (mid-term and end-term) along with suitable measuring indicators
- j) **Resettlement Action Plan:** The scope and level of detail of the resettlement plan vary with the magnitude and complexity of resettlement. The plan shall be prepared based on social assessment survey and should cover the impacts on the community and other adversely affected groups and mitigation measures. (See Annexure X for indicative contents of RAP).
- k) **Indigenous Peoples Development Plan:** On the basis of the social assessment and in consultation with the affected Indigenous Peoplesø communities, Consultant shall prepare an Indigenous Peoples Plan (IPDP) that sets out the measures through which the project will ensure that (a) Indigenous Peoples affected by the project receive culturally appropriate social and economic benefits; and (b) when potential adverse effects on Indigenous Peoples are identified, those adverse effects are avoided, minimized, mitigated, or compensated for. (See Annexure X for indicative contents of IPDP).
- l) **Stakeholder Engagement Plan:** Assessment should include the current practices to develop strategy for continued stakeholder engagement at all stages i.e. from design to implementation to operational/maintenance stages.
- m) **Labour influx Management Plan. Labor Management Procedures:** applicability of labour laws and, non-discrimination and equal opportunity, potential risks of child labor and forced labor, including the workers to be brought to the project by brokers (sub-contractors); grievance mechanism to all workers, occupation health and safety aspects, etc.. The assessment will scope out impact and absorptive capacity on host communities to address risks that arises from labour influx which need to be incorporated in the bid documents for the civil works contractor.
- n) **The HIV Prevention Plan (HPP)** is proposed to be prepared for the project to ensure that development initiatives do not contribute to HIV spread. Based on above, a Report with details of actions, reporting requirements to be adopted by the construction contractors to combat HIV/AIDS transmission among the construction workers and the community around camps shall be prepared as part of the bid documents
- o) **Disclosure of mitigation instruments:** The Consultant are to provide support and assistance to HPRIDC to meeting the disclosure requirements, which at the minimum shall meet the World Bankø policy on public disclosure. The Consultant will prepare a plan for in-country disclosure, specifying the timing and locations; translate the key documents (including the RPF summary, the SIA summary, RAP and the IPDP in local language; draft the newspaper announcements for disclosure; and help the client to place all the ESIA and RAP/IPDP reports in the clientø website.

Refer to Annexures A-D for templates/outlines for preparation of ESIA, RPF, RAP and IPDP.

B. Reporting Schedule

1. **Reporting Requirements/ Deliverables: -**

SN	Deliverables	No. of copies	Due date for submission from the start date of the service (Months)	Remarks
	i. Inception report and work plan (including methodology and site visits)	5	1	
	ii. Preliminary/Draft Stakeholder Engagement Plan (SEP)	5	2	
	iii. Review Report of Feasibility stage reports	5	3	
	i. Resettlement Policy Framework ii. Tribal (Indigenous) Peoples Planning Framework iii. Draft Labor Management Procedure	5	5	
<i>Submit for Tranche I (for 120/128 ? km)</i>				
	i. Environment Impact Assessment Report and ii. Social Impact Assessment Report	5	6	
	iii. Resettlement Action Plan iv. Indigenous People Development Plan (if required) v. Corridor specific ESMP	5	7	
	i. Final Stakeholder Engagement Plan (SEP) ii. Final Labor Management Procedure	5	7	
	Translation of documents for disclosure by HPRIDC	2	7.5	
	Review, update/revise the RPF and TPPF following completion of feasibility studies of entire 2000 km (including balance 522 km upgradation roads and 1350 km maintenance roads including bridges)	5	9	
<i>Submit for Tranche II (230 km)</i>				
	i. Environment Impact Assessment Report and ii. Social Impact Assessment Report		12	

SN	Deliverables	No. of copies	Due date for submission from the start date of the service (Months)	Remarks
	iii. Resettlement Action Plan and iv. Indigenous People Development Plan (for Tranche II ó 230 Km) v. Corridor specific EMP		14	
Submit for Tranche III (300 km)				
	i. Environment Impact Assessment Report and ii. Social Impact Assessment Report		16	
	iii. Resettlement Action Plan and iv. Indigenous People Development Plan v. Environmental Assessment and Corridor specific EMP including biodiversity assessment vi. Biodiversity Management Plan (if presence of protected areas identified)		18	

Terms of Payment

The mode of payments to be made in consideration of the work to be performed by the Consultant shall be as follows:

SN	Deliverables	No. of copies	Due date for submission from the start date of the service (Months)	Payment Schedule (%)
	iv. Inception report and workplan (including methodology and site visits)	5	1	10
	v. Preliminary/Draft Stakeholder Engagement Plan (SEP) and Labor Management Procedure	5	2	10
	vi. Review Report of Feasibility stage reports	5	3	
	iv. Resettlement Policy Framework v. Tribal (Indigenous) Peoples Planning Framework	5	5	
	Finalization of RPF and IPPF incorporating comments by HPRIDC and WB	5	6	5
Submit for Tranche I (for 120 km)				

SN	Deliverables	No. of copies	Due date for submission from the start date of the service (Months)	Payment Schedule (%)
	vi. Environment Impact Assessment Report and vii. Social Impact Assessment Report viii.	5	6	15
	ix. Resettlement Action Plan x. Indigenous People Development Plan (if required) xi. Corridor specific EMP xii. Draft ESCP	5	7	
	iii. Final Stakeholder Engagement Plan (SEP) and Labor Management Procedure and ESCP	5	7	10
	Finalization of EIA, SIA, RAP and IPDP incorporating comments by HPRIDC and WB	5	8	
	Translation of documents for disclosure by HPRIDC	2	8	
	Review, update/revise the RPF and TPPF following completion of feasibility studies of entire 2000 km (including balance 522 km upgradation roads and 1350 km maintenance roads including bridges)	5	9	
<i>Submit for Tranche II (230 km)</i>				
	vi. Environment Impact Assessment Report and vii. Social Impact Assessment Report	5	12	15
	viii. Resettlement Action Plan and ix. Indigenous People Development Plan (for Tranche II ó 230 Km) x. Corridor specific EMP			
	Translation of documents for disclosure by HPRIDC			
	Finalization of EIA, SIA, RAP and IPDP incorporating comments by HPRIDC and WB			10
<i>Submit for Tranche III (300 km)</i>				

SN	Deliverables	No. of copies	Due date for submission from the start date of the service (Months)	Payment Schedule (%)
	vii. Environment Impact Assessment Report and viii. Social Impact Assessment Report		16	15
	ix. Resettlement Action Plan and x. Indigenous People Development Plan xi. Corridor specific EMP xii.			
	Translation of documents for disclosure by HPRIDC			
	Finalization of EIA, SIA, RAP and IPDP incorporating comments by HPRIDC and WB			

Note: all above payments shall be made after review and approval by the client and the World Bank and submission of pre-receipted bills by the Consultant in quadruplicate for respective stages.

Review of reports:-

A review committee (to be restricted to Five members) consisting of following officers of the client's Department will review all reports of Consultant (inception, progress, intermediate and draft final) and suggest any modifications/changes considered necessary within 15 days of receipt.

- 1) Engineer-in-chief (HPPWD)
- 2) Chief Engineer-Cum-Project Director (HPRIDC)
- 3) Superintending Engineer (HPRIDC)
- 4) Nodal Officer Environment (HPRIDC)
- 5) Social development officer(HPRIDC)

Duration of the Assignment:

The total duration of the assignment would be about 16 months.

Accordingly, the total man-month requirements for the assignment would be as follows:

Subject Expert	No. of Experts	Total Man-months
Environment Expert	2	32
Social Expert (SIA & R&R)	2	32
Bio-diversity Expert	1	12
Bio-engineering Expert	1	12
Gender Expert	1	12
Community Consultation Expert	1	12
Highway Engineer	1	12
Geotechnical Engineer	1	3
Support Staff ó Social and Environment	As required	

The Consultant team would be required to undertake at least three visits (and more as required to perform the task envisaged in ToR) to the project in each phase.

The Consultant with their industry experience and in close consultation with the HPPWD/HPRIDC would be required to deploy/demobilize its personnel in accordance with the progress of preparation work by Consultant to ensure that total man-months are not exceeded.

Key Qualifications

1. Environmental Specialist

Educational Qualifications

Minimum ó Master's Degree or equivalent in Environment Sciences or related field

General Experience

Minimum total work experience after post-graduation ó 15 years

Relevant Experience

(i) Minimum 7 years of total work experience on carrying out environment impact assessments of road development projects.

(ii) Desirable - Environmental Expert in at least two World Bank funded projects

Essential Knowledge and Experience

(i) The candidate must have knowledge of the World Bank's guidelines, procedures and operational policies/directives.

(ii) Candidate should be conversant with all the activities expected to be undertaken for Environmental / Forest / Wild life clearance procedures and pertinent guidelines of Ministry of

Environment & forests (MoEF), Government of India.

(iii) The candidate must have the experience of preparing environmental management plans and supervising & monitoring implementation of the plans.

(iv) Working in hilly terrain will be given performance.

2. Social Development Specialist

Educational Qualifications

Minimum ó Master's Degree or equivalent in Social Sciences or related field

General Experience

Minimum total work experience after post-graduation ó 15 years

Relevant Experience

(i) Minimum 7 years of total work experience on carrying out Social impact assessments and preparation of Resettlement Action Plans of road development projects

(ii) Desirable - Social/resettlement expert in at least two World Bank funded projects

Essential Knowledge and Experience

(i) The candidate must have knowledge of the World Bank's guidelines, procedures and operational policies/directives.

(ii) Experience in preparation of RAP, gender plan, LAP, community consultations and IPDP is required.

(iii) Familiarity with project area and local language will be advantageous

3. Biodiversity Specialist

Educational Qualifications

Minimum ó Master's Degree or equivalent in biology or natural resource management or related field

General Experience

Minimum total work experience after post-graduation ó 15 years

Relevant Experience

(i) Minimum 7 years of total work experience on carrying out conducting biodiversity impact assessment for roads located in areas with similar types of biodiversity values and should be conversant in preparing management/mitigation measures for at least two projects of similar type; working knowledge of ecosystem services analysis would be an advantage.

(ii) Desirable ó Biodiversity Expert in at least two project funded by World Bank or international financial institutions funded projects is required

Essential Knowledge and Experience

(i) The candidate must have knowledge of the World Bank's guidelines, procedures and operational policies/directives.

(ii) Candidate should be conversant with all the activities expected to be undertaken for Environmental / Forest / Wild life clearance procedures and pertinent guidelines of Ministry of

Environment & forests (MoEF), Government of India.

(iii) The candidate must have the experience of preparing Biodiversity management plans and supervising & monitoring implementation of the plans.

4. Bioengineering Specialist

Educational Qualifications

Minimum ó Masterø Degree or equivalent in Horticulture, arboriculture or botany or related field.

General Experience

Minimum total work experience after post-graduation ó 15 years

Relevant Experience

- (i) Minimum 7 years of total work experience on community forestry and landscape development programme.
- (ii) Desirable ó Bio-engineering Expert in at least two about 2 highway projects and 2 landscape development projects funded by World or international financial institutions is required

Essential Knowledge and Experience

- (i) The candidate must have knowledge of the World Bankø guidelines, procedures and operational policies/directives.
- (ii) Candidate should be conversant with all the activities expected to be undertaken for Environmental / Forest / Wild life clearance procedures and pertinent guidelines of Ministry of Environment & forests (MoEF), Government of India.
- (iii) The candidate must have the experience of preparing Biodiversity management plans and supervising & monitoring implementation of the plans.

TASKS FOR SOCIAL IMPACT ASSESSMENT AND RAP PREPARATION

A. Background

The Consultant is required to conduct all types of Census and Baseline Surveys, Household Surveys, effective consultations with the project affected people and local community. Broadly, the Consultant will undertake the following activities

1. Undertake preliminary level SIA for the 650 km of upgradation roads; and
2. Undertake detailed DPR level SIA and preparation of RAPs/IPDPs for the 1350 km maintenance roads including bridges.

SIAs will be undertaken as per requirements of the World Bankø new Environment and Social Framework Policy and Standards.

B. Scope of work

The scope of work is as follows:

- a) Social Screening of 2000km roads;

- b) Social Impact Assessment of 650km of road for up-gradation, followed by RAP and IPDP preparation. Prioritising and completing SIA & RAP for
 - i. Barotiwala Baddi Sai Ramshhar (44.95 km) and
 - ii. Raghunathpura Mandi Harpura Bharari (3.5 km)
- c) Social Impact Assessment of 1350km of road identified for Long Term Performance Based Maintenance Contract, followed by RAP and IPDP preparation. This will also include
 - i. Social Impact assessment of bridges identified for reconstruction, rehabilitation and strengthening in 1350km core road network;
 - ii. SIA of 200km of road identified for Road Safety Audit;
 - iii. SIA of black spots improvement in 1150km road;

C. Detailed Scope of Work

Task 1: Activities to be undertaken during Inception Stage

- i. *Familiarize with project:* The Consultant shall use the inception period to familiarize with the project details. Consultant shall (a) study the project information to appreciate the context within which the SIA needs to be carried-out, (b) identify the sources of secondary information on the project, on similar projects and on the project area, (c) select sample corridors based on simple criteria and carry out a reconnaissance survey, and (d) undertake preliminary consultations with selected stakeholders. The Consultant shall coordinate with engineering and environmental studies that are being undertaken in parallel and incorporate recommendations as appropriate. In addition, a mechanism for continuous interaction between the engineering, environmental and social teams shall be formalized and documented in the Inception Report.
- ii. *Review adequacy of work plan:* Following the site visits and stakeholder consultations, as well as a review of the conditions of contract between the Consultant and the Client, the Consultant shall analyse the adequacy of the allocated manpower, time and budgets. The Consultant shall study the various available surveys and other material in order to determine what would be the most appropriate in the context of this project.
- iii. *Review and revise methodology:* As the consultancy services has varying scope of works, and considering project state geographical setting, a pre-defined approach may not be suitable to accomplish deliverables in the Terms of Reference. The Consultant after appreciation of site conditions and scope of consultancy services shall provide methodologies to be used for: social screening, SIA for up-gradation roads and maintenance roads, besides road safety audit, and black spot improvement.

Task 2: Undertaking Social Screening for 2000km core road network as part of Feasibility study and prioritization of road

- Social screening is done in the early stages of the project preparation to make preliminary assessment and review of the social issues that are relevant to the proposed project. The Consultant shall carry out social screening as per the work plan and methods described in the Inception Report, and in consideration of the comments of the Client and the Bank on the same. Specifically, at this stage, the Consultant shall carry out the following tasks:
 - i. *Preliminary Analysis of Impacts:* The Consultant shall conduct a preliminary analysis of the nature, scale and magnitude of the impacts that the project is likely to cause. They shall collect information on the existing right of way, types of land to be impacted, estimate type and number of prevalent structures ó private, government and community owned through review of revenue records and preliminary survey, etc.

- ii. *Review of applicable legislation and regulatory framework:* The Consultant shall undertake a preliminary review to list down national and state and acts, rules and regulations that might be applicable to the project.
- iii. *Scoping for in-depth study:* Scoping needs to identify potential social issues, risks and impacts that should be studied in-depth during SIA stage to comply the requirements of Environmental and Social Standards (ESSs) of the World Bank.
- iv. *Review affected groups to identify presence of Tribals/Indigenous Peoples:* As part of screening, Consultant identify project corridors to ascertain presence of tribals ó whose characteristics match with requirements as listed under ESS 7 and thereby assess need for preparing Tribal Development Plans for those specific corridors.
- v. *Preliminary Stakeholder Engagement Plan:* The Consultant shall develop a stand-alone preliminary Stakeholder Engagement Plan (SEP)³ that shall guide the process of engaging with all stakeholders. In preparing this plan, the Consultant shall carry out preliminary consultations with communities that are likely to be affected on select sample roads, relevant Government Agencies and other stakeholders. The Stakeholder Engagement Plan shall specify what is required for information disclosure and to achieve meaningful consultation. The plan will be such that it shall ensure appropriate project information is disclosed to stakeholders in a timely understandable, accessible and appropriate manner. It shall be revised and refined subsequently.

Outputs at this stage: The Consultant shall prepare: i) Social Screening Report and ii) preliminary SEP. These reports will be reviewed and finalized incorporating comments of the HPRIDC and the World Bank.

Task 2: SIA for 650 km (upgradation roads) and for 1350 km (maintenance roads) and preparation of RAP/ARAP and IPDP

The specific objectives of the SIA are:

- a) To carry out a socio-economic, cultural and political/institutional analysis to identify potential social impacts of the proposed development of the key transport corridors;
- b) To identify all relevant stakeholders, undertake consultations on topics including perceived benefits and impacts, as well as issues related to Gender Based Violence (GBV) concerns about the overall project.
- c) To provide inputs to the project design at the detailed design stage including specific recommendations in selection of design alternatives (identification of areas that may require adjustments in project designs); and
- d) To ensure that results of the SIA provide inputs to the preparation of RAP and also for monitoring of project impacts during implementation and to the evaluation of project outcomes at completion;

D. SIA Methods and Tools:

- (a) For socio-economic, cultural and political/institutional analysis combine multiple tools and employ a variety of methods for collecting and analysing data, including both quantitative and qualitative methods (expert and key informant interviews, focus group discussions, beneficiary assessments, rapid and participatory rural appraisal, gender analysis).
- (b) Develop scoping techniques, interview schedules, field survey instruments and checklist for data collection and discussions.

³ refer to World Bank site for template on preparing SEP.

- (c) Screen and scope to prioritize social issues through different techniques such as ranking and composite index.
- (d) For determining the magnitude of impact and analysis of alternatives develop strip map and indicate all information on structures, utilities and abutting land use that is likely to be affected within the project impact zone.
- (e) The selection of SIA methodology should emphasize consultation and participation of project affected persons (PAPs), project implementing and executing agencies at the state, district and village level. The discussions with the relevant government officials, other institutions and organizations in the civil society, should be participatory and broad-based, leading to the identification, selection and agreement on project.

Output at this stage: The Consultant shall submit the following deliverables for the overall project

- i. Draft Environment and Social Impact Assessment (ESIA)
- ii. Draft Environment and Social Management Framework
- iii. Draft Resettlement Policy Framework
- iv. Draft Tribal Peoples Planning Framework

Based on processing of Tranche I, II and III as finalized by HPRIDC, the Consultant shall submit

- v. Social Impact Assessment for
 - o Priority upgradation corridors (*Barotiwala Baddi Sai Ramshhar (44.95 km) and Raghunathpura Mandi Harpura Bharari (3.5 km)*)
 - o Other upgradation corridors
 - o Maintenance corridors ó 1350 km
- vi. Draft Resettlement Action Plan (RAP) ó corridor specific plans
- vii. Draft Tribal Development Plan (IPDP) ó corridor specific plans
- viii. Draft Stakeholder Engagement Plan

All these reports will be reviewed and finalized incorporating comments of the Client and the World Bank.

Annexure A - Indicative outline of Resettlement policy framework

1. brief description of the project and components for which land acquisition and resettlement are required, and an explanation of why a resettlement policy framework rather than a resettlement plan is being prepared;
2. principles and objectives governing resettlement preparation and implementation;
3. a description of the process for preparing and approving resettlement plans;
4. estimated displacement impacts and estimated numbers and categories of displaced persons, to the extent feasible;
5. eligibility criteria for defining various categories of displaced persons;
6. a legal framework reviewing the fit between borrower laws and regulations and Bank policy requirements and measures proposed to bridge any gaps between them;
7. methods of valuing affected assets;
8. organizational procedures for delivery of compensation and other resettlement assistance, including, for projects involving private sector intermediaries, the responsibilities of the financial intermediary, the government, and the private developer;
9. a description of the implementation process, linking resettlement implementation to civil works;
10. a description of grievance redress mechanisms;
11. a description of the arrangements for funding resettlement, including the preparation and review of cost estimates, the flow of funds, and contingency arrangements;
12. a description of mechanisms for consultations with, and participation of, displaced persons in planning, implementation, and monitoring; and
13. arrangements for monitoring by the implementing agency and, if required, by third-party monitors.

Annexure B - Indicative Outline of ESIA

- a) Executive Summary
 - Introduction
 - Project Description
 - Baseline Environment
 - Anticipated Environmental Impacts and Mitigation Measures
 - Alternatives
 - Public Consultation and Information disclosure
 - Consultation to Date
 - Disclosure of documents
 - Environmental Management Plan
 - Conclusion and Recommendations
- b) Introduction
 - Background/Overview
 - Purpose of the document/ESIA
- c) Legal and Institutional Framework
 - Government Policy
 - World Bank ESF
 - International Treaties
 - Policies Applicable to the Project
- d) Project Description
 - Location
 - Key Project Components
 - Description of Road Alignment
 - Project Design
 - Traffic Volume

- Road Design
 - Overpasses
 - Tunnels
 - Interchanges
 - Corridors
 - Special Curves
- Volume of Civil Works
 Quarries and Borrow Sites
 Construction Camps
 Construction Process
 Project Costs
 Implementation Schedule
- e) Baseline Data
 Physical Resources
- Climate
 - Topography and Landscape
 - Geomorphology
 - Geodynamics process along the project road
 - Geological hazards of the project area
 - Hydrology
 - Hydrogeology
- Ecological Resources
- Flora
 - Fauna
 - Protected Areas
 - Bird migration
- Environment Quality
 Social Economic and Cultural Resources
- f) Environmental and Social Risks and Impacts
 Approach to Screening of Environmental Impacts
- Preconstruction
 - Construction
 - Operation
- Spill Contingency Plan
 Road Safety Measures
 Preliminary assessment of climate change impact
 Induced cumulative impacts
- g) Mitigation Measures: Impact Specific ECoPs
- h) Analysis of alternatives
 Overview
 Without Project Alternatives
 Alternative Analysis in Feasibility Study
 Alternative Analysis during Detailed Design
- Improvement of Project Route of Feasibility Study Stage
 - Study of Alternative Alignment
- Selection of Design and Construction Standard
- i) Grievance Redress Mechanism
 j) Information on Disclosure
 k) Environmental Management Plan
- a. Objective of EMP
 - b. Methodology for EMP preparation

- c. Environmental and social risk and impacts
 - d. Mitigation Measures
 - e. Monitoring timing and performance indicator
 - f. Capacity Building and Training
 - g. Implementation Schedules and cost estimates
 - h. Integration of EMP with Project
 - i. Emergency Response Plans
 - j. Reporting responsibility
 - k. Cost and Estimate
 - l. Special Clause for the BoQ/Bid Document
- l) Measures and Actions for the Environmental and Social Commitment Plan (ESCP)
 - m) Key Appendices

For details refer to www.worldbank.org/esfProject Description

Annexure C - Elements of Resettlement Action Plan

- 1) Description of the project.
- 2) Potential impacts.
- 3) Objectives of the resettlement program.
- 4) Census survey and baseline socioeconomic studies.
- 5) Legal framework
- 6) Institutional framework
- 7) Eligibility
- 8) Valuation of and compensation for losses
- 9) Community participation
- 10) Implementation schedule.
- 11) Costs and budget
- 12) Grievance redress mechanism.
- 13) Monitoring and evaluation
- 14) Arrangements for adaptive management.

Additional planning requirements where resettlement involves physical displacement

- 15) *Transitional* assistance.
- 16) Site selection, site preparation, and relocation.
- 17) Housing, infrastructure, and social services.
- 18) Environmental protection and management.
- 19) Consultation on relocation arrangements.
- 20) Integration with host populations.

Additional planning requirements where resettlement involves economic displacement

- 21) Direct land replacement.
- 22) Loss of access to land or resources.
- 23) Support for alternative livelihoods.
- 24) Consideration of economic development opportunities
- 25) Transitional support

Annexure D - Outline of Tribal Development Plan (TDP)/Indigenous Peoples Development Plan (IPDP)

1. Project Description
2. Objectives of TDP
3. Methodology for preparation of TDP (include results from the Screening exercise)
4. Minimization of impacts
5. Free and prior informed consultations (FPIC) for Broad community support
6. Social Assessment
 - a. Household survey findings
 - b. Impact details - positive impacts and adverse impacts on assets, community resources, livelihood etc.
7. Action Plan
 - a. mitigation measures (as outlined in the TDF)
 - b. FPICs to be undertaken during implementation
 - c. implementation schedule (by activities and months)
 - i. FPIC
 - ii. Provision of mitigation measures
 - iii. monitoring of implementation
 - d. monitoring indicators (as necessary by sub-project)
 - e. implementation budget including cost of
 - i. mitigation measures
 - ii. conducting FPICs - material, logistics
 - iii. miscellaneous contingency
 - f. grievance mechanisms (by level of mechanism)

Annexure E ó Stakeholder Engagement Plan

Summary of Stakeholder Engagement (Previous Project and during feasibility Study)

Stakeholder Identification and Need Assessment

Stakeholder Engagement Program

- Methodology/Strategy
- Mode of communication
- Timing
- Feedback Assessment

Resources and responsibilities

GRM

M&E and Reporting

Annexure F ó Labor Management Procedure

- a. Overview Of Labor Use On The Project: This section describes the following, based on available information: Number of Project Workers, Characteristics of Project Workers, Timing of Labor Requirements, Contracted Workers, Migrant Workers
- b. Assessment Of Key Potential Labor Risks: This section describes the following, based on available information: **Project activities, Key Labor Risks:** The key labor risks which may be associated with the project (see, for example, those identified in ESS2 and the GN). These could include, for example:
 - The conduct of hazardous work, such as working at heights or in confined spaces, use of heavy machinery, or use of hazardous materials

- Likely incidents of child labor or forced labor, with reference to the sector or locality
 - Likely presence of migrants or seasonal workers
 - Risks of labor influx or gender based violence
 - Possible accidents or emergencies, with reference to the sector or locality
 - General understanding and implementation of occupational health and safety requirements
- c. Brief Overview Of Labor Legislation: Terms And Conditions: This section sets out the *key aspects* of national labor legislation with regards to term and conditions of work, and how national legislation applies to different categories of workers identified in Section 1. The overview focuses on legislation which relates to the items set out in ESS2, paragraph 11 (i.e. wages, deductions and benefits).
- d. Brief Overview Of Labor Legislation: Occupational Health And Safety: This section sets out the *key aspects* of the national labor legislation with regards to occupational health and safety, and how national legislation applies to the different categories of workers.
- e. Responsible Staff: This section identifies the functions and/or individuals within the project responsible for (as relevant): engagement and management of project workers, engagement and management of contractors/subcontractors, occupational health and safety (OHS), training of workers and addressing worker grievances
- f. Policies And Procedures: This section sets out information on OHS, reporting and monitoring and other general project policies. Where relevant, it identifies applicable national legislation.
- g. Age Of Employment: This section sets out details regarding: (i) the minimum age for employment on the project (ii) the process that will be followed to verify the age of project workers (iii) the procedure that will be followed if underage workers are found working on the project (iv) the procedure for conducting risk assessments for workers aged between the minimum age and 18
- h. Terms And Conditions: This section sets out details regarding:
- Specific wages, hours and other provisions that apply to the project
 - Maximum number of hours that can be worked on the project
 - Any collective agreements that apply to the project. When relevant, provide a list of agreements and describe key features and provisions
 - Other specific terms and conditions
- i. Grievance Mechanism: This section sets out details of the grievance mechanism that will be provided for direct and contracted workers, and describes the way in which these workers will be made aware of the mechanism.
- j. Contractor Management This section sets out details regarding:
- The selection process for contractors,
 - The contractual provisions that will put in place relating to contractors for the management of labor issues, including occupational health and safety,
 - The procedure for managing and monitoring the performance of contractors.
- k. Community Workers: Where community workers will be involved in the project, this section sets out details of the terms and conditions of work, and identifies measures to check that community labor is provided on a voluntary basis,
- l. Primary Supply Workers: Where a significant risk of child or forced labor or serious safety issues in relation to primary suppliers has been identified, this section sets out the procedure for monitoring and reporting on primary supply workers.