

**Terms of Reference
For
ESIA and Associated E&S instruments for**

- i. 400kV D/C Arun Hub (Sankhuwasabha district) - Inaruwa (Sunnasari district) transmission line and Substations
- ii. Arun Hub (Sankhuwasabha district - Dudhkoshi (Khotang/Okhaldhunga district)- Tingla (Solukhumbu district) Transmission Line and Substations
- iii. 400kV D/C Inaruwa (Sunnasari district)- Anarmani (Jhapa district) transmission and substations

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A. Background, and Project Information

1. Despite tremendous hydropower potential that Nepal is endowed with, the country is facing shortages for both Energy and Peak demand. Currently, only about 70 percent of the country's households have access to grid electricity. The Government of Nepal (GoN) has set a target of providing electricity to all the population in the nation by 2027 (90 percent through the national grid and 10 percent from decentralized generation solutions) and export substantial amount of power.
2. Under the financial assistance of World Bank's Power Sector Reforms and Sustainable Hydropower Development Project, NEA is undertaking the selection of Consultant for the technical feasibility study and detail design of four number of priority transmissions lines and associated substations viz: (i) 400kV D/C Arun Hub (Sankhuwasabha district) - Inaruwa (Sunnasari district) transmission line (about 130 km long) with new substation at Arun hub and substation expansion at Inaruwa in the region of Koshi corridor, (ii) Arun Hub (Sankhuwasabha district - Dudhkoshi (Khotang/Okhaldhunga district)- Tingla (Solukhumbu district) Transmission Line (about 115 km long) with substation expansion at Arun Hub, Tingla and Dudhkoshi (iii) 400kV D/C Inaruwa (Sunnasari district)- Anarmani (Jhapa district) transmission line (about 100 km long) with new substation at Anarmani and substation expansion at Inaruwa. The proposed new lines and substations are envisaged to evacuate the planned hydropower projects in the respective corridors and make the system more reliable. The feasibility studies and detailed design for these lines is in bid evaluation stage and its TOR is attached.
3. In addition to the technical feasibility studies of the transmission lines and substations mentioned in para 1.2, the World Bank has also provided assistance for the Environmental and Social Impact Assessments (ESIA) and related social and environmental risk instruments of these transmission lines and substations. Thus NEA intends to engage a nationally or internationally recognized consulting firm- "Consultant"- having a competent team of specialists for carrying out these activities for the above mentioned transmission lines and concomitant substations.
4. The Consultant shall conduct Environmental and Social impact assessment and related studies of the proposed projects (TLs, substations as well as Ancillary and associated facilities) as per internationally recognized practices, including the latest World Bank's requirements under the new Environmental and Social Framework (ESF), and its applicable provisions/ requirements of ESS 1 to ESS 10. Moreover, the Consultant shall produce a related Environmental Impact Assessment (EIA) of the transmission lines and substations in accordance with the requirement of the Government of Nepal Environment Protection Act, 1997 and Environment Protection Rules, 1997 (with amendment), forest act and regulations, National Park and Wildlife Conservation Act and regulations, environmental standards, work procedures, guidelines and manuals (e.g. Hydropower EIA Manual) etc for the final route.

B. Objective of the Consultancy Services

5. The objective of the consultancy service is to prepare Environmental and Social Impact Assessments (ESIA) for the proposed projects (including TLs, substations as well as ancillary and associated facilities) along with all relevant associated environmental and social instruments.
6. The Consultant shall ensure that the Environmental and Social assessment (ESIA) outputs of this assignment comply with and meet the legal and technical requirements of the Government of Nepal and the World Bank. These, include GoN requirements under Environment Protection Act, 1997 and Environment Protection Rules, 1997 (with amendment), Forest Act and regulations, National Park and Wildlife Conservation Act and regulations, environmental standards, work procedures, guidelines and manuals (e.g. Hydropower EIA Manual) etc; and the World Bank's requirements under the ESF (ESS1 to ESS10), World Bank Group's Environmental Health and Safety Guidelines, including EHS Guidelines for Electric Power Transmission and Distribution, and the World Bank Good Practice Notes (GPNs) on Labor influx and Gender Based Violence.
7. The Consultant shall ensure that all beneficial and adverse impacts associated with construction and operation of the project, including all associated/ancillary works and linked activities if any, are assessed and taken into account. Outputs include the preparation of the Nepal EIA as appropriate, and the ESIA package, including a Cumulative Impact Assessment, Environmental Management Plan (EMP), Resettlement Planning Framework

(RPF), Resettlement Action Plan (RAP), Vulnerable and Indigenous People's Development Plan (VIPDP) and the Forest Clearance Permit Application.

C. Scope of the Services

8. The assignment will be carried out in a synchronized manner with the Detail Engineering Design (DED) for the TLs, which will be contracted separately by NEA. NEA will facilitate the interaction between the ESIA Consultant and the DED Consultant, including the sharing relevant information etc. It is expected that the outputs of both consultants are informed and influenced by the work of the other.
9. The Consultant shall document processes, methodologies, interim outputs etc in suitable forms and formats so that they can be further discussed and agreed upon with NEA throughout the process.
10. The scope of consulting services for ESIA includes, but not necessarily limited to, the following:

Task 1: Environmental and Social Screening and Scoping

11. The Consultant, through initial consultation(s), site visit(s), primary and secondary source collection and review, shall identify the proposed transmission line's salient environmental and social setting and potential risks/ concerns / impacts to be studied in more detail. The scoping phases should help define the scope and work plan of the more detailed studies required. This exercise will be coordinated with the engineering survey works.
12. The Scoping activities will include:
 - a. Review *all available existing information* on environmental and social baseline conditions and potential impacts related to the proposed TLs, substations, and ancillary and associated facilities, as other ongoing or planned TLs the same geographical region / watershed.
 - b. Develop a *project description encompassing TLs, Substations, and ancillary and associated activities* based on descriptions developed by the NEA and/or DED Consultant, including alternatives considered or to be considered, by synthesizing and providing an integrated overview of all key aspects of the projects that will be relevant to the proposed ESIA studies.
 - c. Carry out *initial site visits*, including formal and informal discussions/meetings with local communities, government entities and other key stakeholders, in each project affected area/ influence area (Municipality level and district level). Consultations shall be held in Nepali and/or relevant local language (or with translation). Consultations will enable both verification of the information reviewed from existing sources about the project's social and environmental context, an initial screening of likely environmental and social impacts and sensitivities, and for all relevant stakeholders the be informed about the potential projects.
 - d. Inform potentially affected people and relevant stakeholders about the environmental and social scoping in advance, through appropriate means. In accordance with the requirements of the EPR, the Consultant shall publish a Scoping notice in a national daily newspaper mentioning the ongoing ESIA of the project with a brief description of the project and activities, a list of areas likely to be affected by the project, the potential area of influence, request for comments and suggestions along with address for communication. The copy of notice shall be made available in both English and Nepali and displayed in municipalities and other public places.
 - e. Develop draft *Stakeholder Engagement Plan (SEP)* that shall be applicable throughout the project cycle including the planning stage and provides effective and inclusive engagement with project affected parties. Details of the plan are outlined in Annex A.
 - f. *Area of Influence and Impact Zones*. Through the desk reviews and field screening and verification, define and describe the Project's *Area of Influence*, based upon the area likely to be affected either directly or indirectly by TLs, and substations, including ancillaries and associated activities; as well as induced developments. Identify and describe environmental and social impact zones within the Area of Influence (e.g. direct, indirect, induced, etc), and preliminary

assessment of scale, likelihood and severity of impacts, including assessing the cumulative impact dimensions of the proposed activities.

- g. Undertake initial assessment of the potential issues/impacts/risks, including a preliminary assessment of the potential regional and cumulative impacts arising from the number of transmission lines, substations and associated and ancillary activities in the region being developed;
 - h. Develop TOR's and a work plan for the further studies, assessment, plans and instruments required to for the overall ESIA work.
13. The consultant will prepare specific Screening and Scoping Reports and ToR to meet GoN environmental requirements. The Scoping Report will consist of, but not limited to, the following:
 - a. Project description and definition of overall project Area of Influence (including impact zones)
 - b. Summary of findings on the key potential environmental and social issues/ risks/ impacts, and baseline features/aspects, which should be included for further study in the environmental and social assessment and planning studies.
 - c. Applicable regulatory requirements of GoN, as well as World Bank ESF, ESS1-10 and WBG EHS Guidelines
 - d. Draft TORs/outlines of each of the further environmental and social assessments and instruments required, including a ToR(s) and Scoping Document(s) for EIA(s) as required by the GoN environmental legislations including EPA/ EPR.
 - e. The scoping report will describe the methodologies to be used for carrying out ESIA and other assessments and preparing various plans; and contain a detailed work plan to conduct the studies, prepare the plans etc.
14. The consultant, facilitated by NEA, will organize meetings to present and discuss the screening stage and scoping stage findings with the NEA, DED Consultant and key stakeholders.
15. The draft scoping report and ToR (s) will be reviewed by the NEA. The Reports and ToRs will be revised based on the feedbacks received. Final ToRs will be shared with the World Bank for review and clearance.

Key expected outputs of Task 1

- I. Screening and Scoping Reports
- II. ESIA TORs for each environmental and social assessment to be carried out, including specific EIA ToR for submission to the Ministry of Forests and Environment.
- III. A report on stakeholders' consultations and engagement (including those completed during screening and scoping), and a *draft SEP* for further development (see below) and ongoing stakeholder engagement

Task 2: Environmental and Social Assessment and Planning

16. The consultant shall develop the Environmental and Social Impact Assessment (ESIA) report based on both primary and secondary data collection and analysis. The process shall ensure compliance and consistency with Government of Nepal legal requirements including EPA/EPR requirements and the World Bank requirements for Environmental and Social Assessment as per the new World Bank ESF.
17. Any contact or interviews for preparation of baselines or social assessment should be planned and carried out in a culturally appropriate manner, in a language acceptable and used by the communities and in coordination with any other preparation work being carried out about Indigenous Peoples.
18. The full and specific scope of this Task will be defined by the outputs or Task 1; nonetheless, it is presumed that the following will be included;

Environmental and social baseline

19. The Baseline of the area of influence, based on Task 1 and should include the following (for TLs, substations and auxiliary & associated facilities):

a. Physical environment, including:

- i. Geology, watershed, landslides and erosion: Include topography/ terrain, geology and geomorphology and slope stability & landslide/ soil erosion risk zones (noting the geological conditions, slope steepness, vegetation type, etc. Describe current status and trend).
- ii. Water, Rivers and Hydrology: rivers, their natures, floods & disasters, etc GLOFs, Landslide Dam-break Failure Floods (LDFFs), very high river flows, etc
- iii. Physical cultural resources: identify and characterize any sites, structures, or natural features and landscapes– above ground, underground, or underwater – that are of archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance. Indicate whether any identified cultural resources are subject to special treatment under national law.

b. Biological environment, including:

- i. Forests and protected area: areas, types. characterization of terrestrial flora, fauna and natural habitats; migratory and endemic species (including any applicable conservation or protection status, and IUCN Red List status), economically or culturally important species, and others which play important ecological functions as food sources or sustainers of the habitat of identified key species. Migratory/ movement routes of birds and animals.
- ii. Aquatic species and natural habitats. including migratory and endemic species (including any applicable conservation or protection status, and IUCN Red List status), economically or culturally important species, and others which play important ecological functions as food sources or sustainers of the habitat of identified key species
- iii. Identification of Bio-diversity hot-spots (based on the above).

c. Socioeconomic environment, including:

- i. Demography and ethnicity: Develop a demographic and ethnic profile of the population in the project area. For communities specifically affected by the project, describe in detail their history, physical spread, social clustering, cultural and traditional characteristics, interactions and relations among various groups. Also discuss formal and informal institutions, social networks and social support systems, and their capacity and functioning; development needs and challenges.
- ii. Religion and culture: Provide relevant information on community festivals, rituals and religious and cultural monuments, practices, knowledge, skills, instruments, and other key resources to be affected by the subproject.
- iii. Socioeconomic development status: Map out the socioeconomic development status of the project area, including resource conditions, economic activities, employment sources and trends, infrastructure and service provision (education, transport, extension services etc.), as well as local development needs, priorities, challenges, and planned or ongoing development interventions.
- iv. Livelihood activities: Characterize economic and subsistence-oriented livelihood activities, both for communities residing within the project Area of Influence as well as for individuals or industries which depend on resources in the Area of Influence, including activities related to fisheries, forestry or forest products, or other natural

resources, as well as agriculture and industry (tourism). Access to natural resources and their significance to local communities and livelihoods. Discuss gender related work load sharing and family economy; dependency and use of local and external resources; and production and marketing systems and patterns.

- v. Community health: Provide an overview of key health issues, focusing on the presence of any disease which may become more prevalent in the area due to the project, as well as the coverage and quality of health services available in the project area.

d. Land management- usage, ownership patterns

- i. Land use: characterize current land uses and indicate major trends in land use change which are taking place irrespective of the proposed project. Identify Rural and urban areas including identification of areas with urbanization potential.
- ii. Land tenure: Characterize types of land tenure (e.g., titles, customary), formal and informal institutions related to land tenure, and modes of land transactions in the project area.

e. Vulnerable and indigenous peoples:

- i. Community Structures and Practices: Identification of any specific socio-cultural structure and practices that may influence the impacts of the project on the specific communities.
- ii. Patterns of inclusion and Exclusion: Presence of people based on vulnerability and compile information on their demographics, socio-cultural features, livelihood and employment patterns, use of natural resources, formal and information institutions, and interactions with other ethnic groups. Provide gender-specific information as possible.

f. Gender

- i. Review of the legal and policy framework in Nepal relevant to gender;
- ii. Review of formal and informal institutional structures and processes that affect gender outcomes in the project and under the project setup;
- iii. Review of setup, capacity and constraints within relevant institutions to address gender concerns and considerations;
- iv. Analysis of local culture, particularly among different indigenous groups, regarding gender and women, focusing particularly on the informal institutions, cultural norms, behavior, and customs;
- v. Review of traditional roles and current status of women in the social, economic, cultural, political and institutional contexts of the communities in the project areas;

Alternative Analysis

20. As part of the ESIA process, the consultant shall carry out alternative analysis of the TL(s) alignment(s) and substations locations. This should build on the alternatives considered by the feasibility studies, alternatives considered by the DED Consultants, and ideal the alternative analysis would be don't in collaboration with these consultants.
21. The alternative analysis, inter alia, will examine potential application of mitigation hierarchy of avoidance, minimization, mitigation, and offsetting/ compensation of the adverse impacts. The alternative analysis will compare "with" and "without project" scenarios of potential adverse impacts. The concept of alternatives extends to alignment/ sitting, design, technology selection, construction techniques and phasing, and operating maintenance procedures; alternatives for environmental management system. The Consultant will compare alternatives in terms of potential environmental impacts; capital and operating costs; suitability

under local conditions; and institutional, training and monitoring requirements etc. To the extent possible, costs and benefits of each alternative.

22. Findings of the alternative analysis, from early stage, will be shared with DED Consultant (NEA will facilitate the coordination and sharing) as an input to the decision-making in the process of final selection of the TL alignments and sites for the substations.
23. As part of the Alternative Alignment analysis the following tasks will be performed by the Consultant:
 - a. Review the feasibility studies of the TLs and Substations and summarize the extent of consideration of environmental and social issues in forming the technical recommendations on aspects such as siting, alignment, design, phasing, and construction techniques. Assess the environmental and social impacts (positive and negative) for each alternative. NEA will ensure that the DED Consultant provides relevant information on the design alternatives under consideration to the Environmental and Social Consultant.
 - b. Put forward any other alternatives deemed worthy of consideration by the ESIA consultant based on Environmental and social considerations. Share and discuss the assessment findings and conclusions with the DED Consultant and NEA.
 - c. Provide input to the finalization of the design alternatives analysis, including recommendations on the design alternative(s) that best minimize negative environmental and social impacts and maximize positive impacts, while remaining technically feasible.
24. The above tasks will be conducted through desk reviews, field verification and consultations with stakeholders, particularly local communities. This will require the ESIA Consultant to work closely with the DED Consultant. All consultations shall be documented.

Impact Assessment and Analysis

25. Assess direct, indirect and induced impacts and risks in the short- term and the long-term resulting from construction and operation activities of the project (TLs and Substations, as well as auxiliary and associated facilities) and propose mitigation measures for identified impacts. While the full scope of the coverage of impact assessment/ analysis will be confirmed during Task 1 (screening and scoping), the following issues are likely considered to be relevant:
 - a. Degradation or loss of forests, natural habitat including critical natural habitat from direct construction and/ or operation. This should include, in particular, impacts to the conservation area; natural habitats including migratory / movement routes of birds, elephants, and other species, and impacts on the biodiversity hot-spots in the influence area.
 - b. Landslide and soil erosion impact and slope instabilities (including due to loss of vegetation on the TL corridors, quarrying, borrowing, site management, and spoil disposal);
 - c. Noise Generation, air pollution and traffic impacts during construction phase.
 - d. Impacts on health and safety (workers, as well as public/ community health and safety)
 - e. Potential deterioration in water quality due to disposal of solid and liquid waste from labor camps and construction activities;
 - f. Induced impacts from project-related influx – including increased stress on natural resources (especially forests), pollution and waste management issues, strain on local services and infrastructure, safety issues for the local community etc and potential GBV issues. The Consultant should refer to the World Bank's Good Practice Note on Labor Influx and Gender Based Violence.
 - g. Impact and risk of discrimination, child labor and forced labor including the workers to be brought to the project by the contractors or labor brokers

- h. Impacts to public health via wastes and sanitation, electro-magnetic field (EMF) and corona effect, waste and hazardous waste storage and disposal sites; etc
- i. Impacts of permanent and temporary land acquisition on land use patterns,
- j. Impacts to agricultural land, income, livelihood, and public and private asset/property.
- k. Impacts on archeological, historical and cultural heritage.
- l. Impacts from auxiliary facilities and associated facilities
- m. Both beneficial and adverse impacts related to substations, transmission lines, and access roads including increased economic connectivity for local communities;
- n. Analysis of potential project impacts, both positive and negative, on women, including gender-specific impacts on household activities, employment at project site, illegal trafficking etc.;
- o. Analysis of barriers, challenges, constraints to women's participation, including an assessment of women's capacity to participate;
- p. Combined/ Cumulative environmental impacts of the proposed TLs as well as already existing TLs and TLs that are planned for development in near future (in next 10 years), if any.

Stakeholder Analysis and Engagement plan

- 26. The consultant will conduct stakeholder engagement during ESIA preparation as per the SEP. The feedbacks received shall be analyzed, and the consultations shall determine how it can be addressed in the ESIA and project designs. Consultation sessions should be organized in coordination with the feasibility and DPR consultant (See Annex A for indicative Table of Content).
- 27. A more developed *Project SEP* should also be prepared during the ESIA process, to ensure that all the project affected parties and different interest groups are identified and included in any ongoing engagement plans.
- 28. The consultant will specifically identify those project-affected parties (individuals or groups) who, because of their circumstances, may be disadvantaged or vulnerable.
- 29. Stakeholder engagement should not be treated as a project information dissemination session but should be used to take into account the main interest of the stakeholders and improve the plan and design of the project and shall continue throughout the project life. The ESIA should reflect the comments and responses to various consultations.
- 30. Project information shall be disclosed as early as possible and, in a way, and timeframe that allows the stakeholders to understand the risks and impacts of the project, and potential opportunities and have meaningful consultations with the stakeholders on project design. Information will be disclosed in relevant local languages and in a manner that is accessible and culturally appropriate.
- 31. A draft of the SEP will be disclosed as early as possible to seek the views of the stakeholders on the SEP and update the SEP.

Environmental and Social Management Plan (ESMP)

- 32. Develop an ESMP encompassing the following, based on the findings of the assessment process and details on all recommended measures to be taken during construction and operation of the project to avoid, minimize, mitigate, compensate and/or offset the identified adverse environmental and social impacts, as well as the recommended specific actions, indicators for monitoring and evaluation, institutional responsibilities, reporting arrangements, and budget needed to implement these measures.
- 33. Specific sub-plans should be developed to manage site-specific and phase-specific mitigation measures that are identified through impact assessment process. Further, specific plans for management of specific social impact issues should also be included- as outlined below.
- 34. The overall ESMP shall include,

- a. A brief description of mitigation measure for the identified impact with timeline for its implementation, responsibilities for executing measures, indicators for measuring success and budgetary requirement;
- b. Occupational health and safety plan, Community health and safety plan, Traffic management plan and,
- c. Labour management plan/procedure (See Annex B for details)
- d. Compensatory Planation Plan (including management of tree species and plantations taking into consideration of the GoN requirements and requirements under ESF, and relevant ESSs.
- e. Biodiversity Management Plan including Measures to minimize and mitigate natural habitat degradation and loss, including on migratory or soaring birds, and development and implementation of conservation offsets where required to meet the objectives of the ESSs
- f. Landslide and Erosion prevention and management Plan;
- g. Construction camps management plan;
- h. Construction waste and trash disposal plan;
- i. Cultural, archeological and historical heritage management plan
- j. A Community Safety and GBV Plan

Resettlement Policy Framework (RPF) and Action Plans (RAP)

35. The proposed projects are expected to require land acquisition and involuntary resettlement however transmission line corridor and substations locations will be finalized during construction phase. Thus, a resettlement policy framework that describes the policies, procedures and processes that will be followed in order to mitigate the adverse social impacts shall be prepared. It will outline the likely categories of impacts and mitigation measures for each category of impact will be prepared. The RPF needs to cover the approach that will be used for both tower pads and Right Of Way (RoW). The approach to compensation and impact mitigation processes for the RoW should take into account lessons from other TL in Nepal and should ensure that economic impacts are adequately understood and accounted for.

36. The RPF covers the following elements:

- a. A brief description of the project and components for which land acquisition and resettlement are required, and an explanation of why a resettlement policy framework is being prepared;
- b. A review of the legal framework and fit between borrower laws and regulations and Bank policy requirements and measures proposed to bridge any gaps between them;
- c. Principles and objectives governing resettlement preparation and implementation, linking resettlement implementation to civil works;
- d. A description of the process and criteria for assessing RoW impact and compensation packages;
- e. A description of the process for preparing and approving resettlement plans;
- f. Estimated displacement impacts and estimated numbers and categories of displaced persons, to the extent feasible;
- g. eligibility criteria for defining various categories of displaced persons;
- h. Methods of valuing affected assets;
- i. 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;
- j. A description of grievance redress mechanisms;

- k. A description of the arrangements for funding resettlement, including the preparation and review of cost estimates, the flow of funds, and contingency arrangements;
 - l. A description of mechanisms for consultations with, and participation of, displaced persons in planning, implementation, and monitoring; and
 - m. Arrangements for monitoring by the implementing agency and, if required, by third-party monitors.
37. At the same time specific Resettlement Action Plans shall be prepared for locations that are known already at the time of the ESIA preparation. The scope of requirements and level of detail of the RAP vary with the magnitude and complexity of resettlement and should be in line with the RPF. 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 Annex C for indicative contents of RAP). Elements of RAP include, but not limited to, the following:
- a. Census survey and baseline socioeconomic study of affected population
 - b. Findings of analysis of the legal framework
 - c. Methodology to be used for valuation of and compensation for losses
 - d. Community participation (including host community, where relevant) in the design and implementation of RAP.
 - e. Development of grievance redress mechanism that describes affordable and accessible for third-party settlement of disputes arising from displacement or resettlement.
 - f. Additional planning requirements where resettlement involves physical displacement and economic displacements

Vulnerable and Indigenous People's Development Framework (VIPDF) and Plans (VIPDP)

The project area is inhabited by indigenous communities who are expected to be impacted by the project. Vulnerable and Indigenous People's Development Framework and Plans shall be prepared to minimize negative impacts and enhance positive impacts to vulnerable and indigenous Peoples in the project areas.

The Framework should include, but is not limited to, the following (see Annex D for details):

- g. Review of Nepal's legal and institutional framework regarding vulnerable and indigenous communities including relevant laws and policies of GoN, any ratified international conventions and the ESS7
- h. Mapping of indigenous organizations.
- i. Assessment of the nature and degree of expected direct and indirect economic, social, cultural (including cultural heritage), and environmental impacts on Indigenous Peoples.
- j. Assessment of the relative vulnerability of and risks to, the affected indigenous people's communities in the area given their distinct circumstances and close ties to land and natural resources, as well as their lack of access to opportunities relative to other social groups in the communities, regions or national societies in which they live.
- k. Methodology for more targeted community specific assessments that may be required in order to prepare site specific VIPDP's.
- l. In line with the mitigation hierarchy, explore alternatives to avoid and minimize adverse impacts as well as opportunities for culturally appropriate and sustainable development. Propose compensation for those adverse impacts in a culturally appropriate manner proportionate to the

nature and scale of the such impacts and the form and degree of vulnerability of the local community.

- m. Assess whether Free, Prior and Informed Consent (FPIC) is required, based on the following criteria- Where the project will:
 - i. Have adverse impacts on land and natural resources subject to traditional ownership or under customary use of occupation;
 - ii. Cause relocation of Indigenous Peoples from land and natural resources subject to traditional ownership or under customary use or occupation; or
 - iii. Have significant impacts on indigenous peoples cultural heritage that is material to the identify and/or cultural, ceremonial, or spiritual aspects of the Indigenous Peoples communities lives.
- n. In case that FPIC is required, design a process that could support the communities and the government counterparts to develop an FPIC agreement.

At the same time specific VIPDP's shall be prepared for locations where alignments is already known already at the time of the ESIA preparation. The scope of requirements and level of detail of the VIPDP's should vary with the magnitude and complexity of impacts on the specific community. The Plan should be in line with the VIPDF, and mitigation/benefit sharing measures based on the social assessment survey and the more targeted community assessment. If community specific FPIC processes are required, then the VIPDP's should include a community specific process in line with the process outlined in the VIPDF.

Gender Action Plan

38. Women are important stakeholders in hydropower development, falling among both the affected and the beneficiaries. Based on the social assessment, it is important to differentiate both the impacts on women, but also the ways in which mitigation measure and benefits will be targeted at women. The gender action plan will cover, but not be limited to, the following:
 - a. Identification of potential entry points and interventions to enhance gender sensitivity, mitigate adverse impacts, promote women participation, maximize project benefits for women;
 - b. Advice to the project planning and implementation teams on approaching and addressing gender issues under the project;
 - c. Recommendations for approach and interventions to promote project benefits to women and their participation in the project.

Monitoring Plan from ESMP and related Plans

39. The Monitoring Plan should set out the key indicators and parameters to be monitored over the life of the project, including specific activities, monitoring methodologies, frequencies, monitoring methodologies, required budgets, and responsible entities to carry out monitoring for each of the above-mentioned sub-plans as well as to follow up on monitoring outcomes. Follow up processes should include processes to identify root causes and correct non-compliances (including through remedial measures if required), as well as to enable continuous evaluation of overall performance and adjustments to management measures and arrangements as needed to enhance overall project sustainability.
40. Institutional arrangement Detail organogram showing all actors to be involved in ESMP implementation, monitoring, reporting, independent supervision and auditing, their relationship to overall project construction and operational management teams and contractors, and their responsibilities.
41. The Consultant shall estimate the costs of implementing those measures and set out the requirements and cost for institutional and training to implement them. The Consultant will consider all issues related to compensation to affected parties for impacts which cannot be mitigated. The Environmental and Social Management Plan (an integral part of the ESIA) will include proposed work programs, budget estimates,

schedules, staffing and training requirements or other necessary support services to implement the mitigating measures.

42. Independent auditing arrangements, as well as incentive schemes and/or penalties to enhance compliance, should also be proposed.

ESIA Executive Summary

43. The ESIA Executive Summary, including Plan summaries, should be translated into both Nepali and the local Indigenous Languages for public consultation and dissemination.

Disclosure and Consultations on draft studies

44. The consultant will support NEA conduct public hearings at least in two locations within the project influence area, as well as dissemination and consultation workshops at local, State and central level, once the draft environmental and social assessment and planning materials are available.
45. The Consultant shall produce full draft ESIA (in English), as well as an Executive Summary and summary plans in English, Nepali and relevant local indigenous languages. Additional materials can for consultations should be produced as required but the specific context.
46. Based on the SEP, Consultations should follow international good practices on stakeholder engagement consistent with or exceeding the GoN and World Bank requirements, with detailed records kept including locations and dates of all consultation events, participants' names and affiliations, a summary of topics discussed, a summary of comments received; and how those comments will be taken into account by the project. All the consultations should be conducted in the relevant local language and safeguards instruments (e.g. RAP, VCDP and ESMP etc.) prepared will be made available to the concerned communities, local level NGOs and the others concerned in the subproject sites for the feedback.
47. Following consultations as well as review of the draft studies by NEA and the World Bank, the Consultant shall make necessary revisions and finalize the ESIA report, RPF, RAPs, VIPDP and others. The Consultant shall submit the revised reports to NEA for the approval of MoFE and WB.

Key expected outputs of Task 2

- I. Full ESIA report, incorporating all the elements outlined above, required under national legislation and the World Bank ESF, revised to incorporate feedback received during consultations as well as from NEA and the World Bank.
- II. Stakeholder Engagement Plan
- III. RPF, RAPs and VIPDPs for each subproject
- IV. Gender Action plan
- V. Executive Summary, in both English, Nepali and Local Indigenous Languages

Task 3: Forest Clearance Permit Application

48. Based on the baseline data collected, findings of the impact assessment, final plan and design of the TLs, substation and auxiliary facilities, and mitigations included in the ESMP, consultant shall prepare an application for the permission for clearance of forests; containing relevant data and information available. The Forest Clearance Permit application is formally made after the Nepal EIA is approved. However, all forestry data required for the application shall be included in the baseline survey and impact assessment activities and summarized in the EIA to expedite this application process. Therefore, while forest clearance permits are separate administrative tasks from the EIA permitting process, the forestry surveys and field tasks for the EIA and forest clearance permitting shall be a single work-flow.
49. To complete this sub-task the Consultant shall, among other activities: undertake forest surveys of all affected forest areas in accordance with applicable Nepali regulations; determine, in coordination with the District Forest Office and community forest users groups (where applicable), the proposed methods for forest

clearance, mark all the trees in the RoW as per the practice of Forest Office, calculation of volumes of logs and woods, use of downed timber, location and process for all required compensatory reforestation, timeline and roles and responsibilities for all involved stakeholders; and prepare all necessary application forms, reports and presentations to support NEA gain approval of the Forest Clearance Permit. The Consultant shall conduct steps necessary to request the DoF and community forest users' groups to provide written acceptance of the forest clearance and reforestation plan prior to submission of the EIA and shall make a record documenting such steps and the outcome of the requests.

Expected output of Task 3

- I. An application for the permission for clearance of forests; containing relevant data and information available at the time finalization of the ESIA.

D. Coordination and progress review

Coordination

50. The Consultant will work closely with the office of NEA and relevant ministries & agencies. The Consultant's team leader will be the principal contact and will be expected to be readily available at the Project office with a notice of seven days from the Project during the assignment period. The Consultant will be responsible for all aspects of performance of services set forth in the TOR.

Progress Review Meetings

51. The Consultant shall hold periodic progress meetings with the Client at least once a month. Additional meetings shall be scheduled if necessary. The intent of these meetings will be for the Client to provide input and to discuss options for addressing the Client's comments. The Consultant shall fully cooperate with the Client in scheduling and attending such meetings as requested by the Client. These meetings shall be held at NEA office in Kathmandu/NEA training centre. The Client will be responsible to prepare meeting minutes during each of these meetings. Minutes will be distributed to participants for review and comment. The consultant is also required to make presentation to ESSD and higher management of NEA as and when necessary.

Monthly Progress Reports

52. The Consultant shall furnish the Client with a written Monthly Progress Report that summarizes all aspects of the completed monthly and cumulative work progress. The objectives of the Monthly Progress Report are to:
- a. Provide a reliable and readily accessible summary record of the project activities with daily activities performed by each individual at the site and progress of work during last month with verification of daily task in the site signed by the project's representative.
 - b. Provide a detailed description of all work completed up to the date and revision to the project schedule required, which shall reflect changes in the critical path since the date of the last revision.
 - c. Identify issues and problems requiring action by the Client or the Consultant, including issues of conflicting priorities.
 - d. Provide a forecast of the work to be accomplished in the next month.
 - e. Provide information to help substantiate the Consultant's pay request

E. Submittal Protocol

53. No later than thirty (30) days after the Commencement Date, the Consultant shall submit a submittal protocol for the Consulting Services. The submittal protocol shall identify the submittal documents/reports to be

prepared by the Consultant including but not limited to detailed listing of the content, the expected dates of the submittals, number of copies, and distribution of the submittals by the Consultant based on distribution information provided by the Client.

54. The Consultant shall provide submittals for review consistent with the submittal dates. The Consultant acknowledges that the Client's review will often involve input from, or consultation with, a number of individuals. Therefore, should submittal dates to the Client be delayed, the Consultant shall provide prompt notice to the Client of the delay. In no case shall this notice be given less than ten (10) calendar days prior to the scheduled submittal date for that submittal. The submittals shall identify any proposed change to the requirements, or the design concept, project delivery approach, or the project schedule provided in the Consultant's proposal, accompanied by the rationale behind the proposed change. No changes shall be implemented without the Client's acceptance. Such acceptance shall not, however, relieve the Consultant of any of its obligations under the contract.

Form of Submittals.

55. Each submittal shall be transmitted electronically (both PDF as well as editable version) and in hard copy, unless otherwise required by other sections of the TOR, with a cover letter to the Client at the office of NEA. Unless otherwise specified in the contract, the Consultant shall prepare up to five (05) hard copies of each submittal for distribution. The Client is responsible for distribution of submittals to reviewers. Electronic submittals shall be in the original file format. The Consultant is responsible for the accuracy and completeness of the information submitted.
56. The Consultant shall make submittals far enough in advance of subsequent activities to allow time for reviews, consultations with other entities, for securing necessary acceptance, for possible revisions and re-submittals. The Client intends to process Consultant's submittals as quickly as practical.

Client's Review.

57. The Client will review submittals for consistency with the methodology concept presented in the Consultant's proposal. The primary purpose of the Client's review is to satisfy itself that the submittals generally conform to the intent of the contract. The Client's review shall not relieve the Consultant of the sole risk and responsibility for all defects, errors or omissions, or of sole responsibility for meeting all requirements of the contract.

F. Staffing and Key personnel

58. The ESIA shall be prepared by an independent consultant that has no conflict of interest resulting from having been the lead consultant and/or member of a consortium or joint venture responsible for undertaking the feasibility and pre-design studies for the project.
59. It is estimated that about 42 person-months of key experts and 7 person-months of supporting experts will be needed from a firm specializing in social and environmental studies in Hydropower/Transmission Line projects.
60. Consultant shall assemble a team of both key and non-key experts. A list of key experts is as per the table below. The Consultant shall propose suitably other supporting experts as may be required to render the services on time. The list of key experts (LOE) and estimated level of efforts are indicative, and Consultant is free to propose their own LOE to match their methodology and staffing plans, noting any deviations from the notional LOE as well as the reasons behind them. Consultant shall provide and maintain all key experts throughout the assignment; any changes are subject to prior approvals by NEA in accordance with the terms of the contract.
61. The Consultant shall plan its activities and deliverables in such a way that most of the works will be managed out of a Kathmandu office. The international are expected to spend at least half of their time in Nepal.

Qualification of Key Experts

Key Experts	Qualification
Team Leaders (International)	<p>It is envisaged that the work will require two team leaders given the need for both Expert Environmental and Social Skills. The Consultant can put forward one overall manager out of the two, understanding the need of strong technical leads in both areas.</p> <ol style="list-style-type: none"> 1. Team Leader Environment shall at least have a Master's Degree in Environment Science/ Environmental Engineering / Environmental Management/Natural Resource Management /Zoology/Botany/Ecology with 15 years of professional experience in the related field. 2. Team Lead Social shall have at least a Master's Degree in Anthropology, sociology or another social science with 15 years of professional experience in the related field. <p>These experts should have specific experience in preparation of ESIA and related instruments in hydropower/Transmission Line projects, and have the knowledge and working experience in preparation of ESIA according to the World Bank's/ other MDB's Environmental and Social guidelines and Resettlement Policy. The team leaders should have proven international level experience of carrying out similar assignment in a leadership position.</p>
Deputy Team Leader (national)	<p>He/She shall at least have a Master's Degree in Environment Science/ Environmental Engineering / Environmental Management/Natural Resource Management or a related field with 10 years of professional experience in the related field. The deputy team leader should have specific experience in preparation of ESIA and related instruments in hydropower/Transmission Line projects per national requirements and have proven experience in a leadership position for similar assignment.</p>
Environmental safeguard experts (one international and one national)	<p>They shall have a master's degree in Environmental Science/ Environment Management/ Environmental Engineering or closely related discipline with more than ten (10) years of professional experience in the related field. The experts shall have experience in conducting environmental impact analysis (EIA)/Initial environmental examinations (IEE)/ESIA of hydropower/transmission line projects as per national laws and international best practices relating to EIA and IEE. He/She shall also have the experience of preparing the ESMP of the Hydropower/Transmission Line Projects.</p>
Sociologist/Antropologist (national)	<p>He/She shall have preferably a master's degree in Sociology/ Anthropology or related discipline with more than ten (10) years of professional experience in the related field. The expert shall have proven working experience and knowledge in Nepal and experience in conducting EIA/IEE of hydropower/transmission line projects as per national laws relating to EIA and IEE.</p>
Zoologist cum wildlife expert (national)	<p>He/She shall have a master's degree in Zoology or related studies with more than five (5) years of professional experience in the related field. The expert shall have experience in works related to zoological studies of the Hydropower/Transmission Line Projects.</p>
Botanists/Ecologists (one international and one national)	<p>They shall have a Master's Degree in Botany/Ecology/ forest or related studies with more than five (5) years of professional experience in the related field. The experts shall have experience in works related to botanical</p>

	and ecological studies, preferably related to Hydropower/Transmission Line projects. One expert should have proven international knowledge and experience and one should have proven local knowledge and experience in Nepal.
Forest Expert (national)	He/She shall have a master's degree in Forestry or forest related studies with more than five (5) years of professional experience in the related field. The expert shall have experience in works related to forest clearance, tree cutting plan and tree cutting approval from the forest office for development projects in Nepal.
Ornithologist (international)	He/She shall have a Master's Degree in Zoology or a related field and 10+ years of international experience assessing the impact of transmission lines on migratory and other species. Should have knowledge of Himalayan species, field work experience in developing mitigation programs related to hydropower or transmission lines for migratory and other species of birds.
Resettlement Experts (one international and one national)	They shall have a Master's Degree in related studies and more than five (5) years of professional experience in the related field. The experts shall have working experience in the preparation of RAP and VIPDP as per World Bank's or any other Multilateral Development Bank's guidelines and knowledge of local laws and regulations related to land acquisition and resettlement in Nepal.
Indigenous People's Expert (national)	He/She shall have a Master's Degree in related studies with more than five (5) years of professional experience in the related field. The expert shall have working experience in the preparation of VIPDP as per World Bank's or any other Multilateral Development Bank's guidelines, and knowledge of the FPIC process.

G. Deliverables

62. Following the signing of the Contract and issuance of the contract commencement, the consultancy shall be launched with a formal kick-off meeting at a location to be determined by NEA (in Kathmandu, Nepal). The Consultant shall be represented by at least the team leaders and key experts. Key deliverables and due dates are listed in the table below.
63. The Consultant shall prepare all surveys and reports necessary for the application and approval of the forest clearance permit based on applicable Nepali regulations at the time of the forest clearance permit application.

Schedule of deliverables

S.No	Milestones (submission and acceptance of reports under the various tasks of Scope of Services)	Due date
1	Inception Report	Within 4 weeks of Contract Commencement
2	Screening Report, Scoping Report and ESIA TOR	Within 8 weeks of Contract Commencement
3	Monthly Progress Reports (12)	On the 15th of each month for the previous month
4	Stakeholder Engagement Plan and Tools	Within 10 weeks of Contract Commencement

6	Preliminary EIA/ESIA Baseline Study, and proposed RAP Entitlement Matrix/ Eligibility Table	Within 24 weeks of Contract Commencement
7	Draft EIA and ESIA	Within 38 weeks of Contract Commencement
8	Final EIA and ESIA Report including ESMP and detail monitoring framework	Within 44 weeks of Contract Commencement
9	Draft RPF, RAP, VIPDP and Gender Action Plan	Within 48 weeks of Contract Commencement
10	Forest Clearance Permit Application	Within 48 weeks of Contract Commencement
11	Final RPF, RAP and VIPDP	Within 52 weeks of Contract Commencement

H. Counterpart Support and Inputs Provided by NEA

64. NEA shall work in close collaboration with the consultant's team and provide necessary support in all aspects of the consulting services. t. If required by local regulations, NEA will provide Consultant with necessary support letters for obtaining visas and permits for its experts. The cost and timing of obtaining the above is entirely the responsibility of the Consultant.

I. Duration and Commencement of Contract:

65. The Services under this assignment are expected to be conducted for a period of approximately twelve (12) calendar months and expected to commence in November, 2019 .

Annex A: Stakeholder Engagement Plan

The Stakeholder Engagement Tools shall include all tools necessary to implement the stakeholder engagement plan, including a Grievance Redress Mechanism, Stakeholder Consultation Database, FAQ document, and proposed consultation materials.

Stakeholder Engagement Plan, which will include the following sub-headings (as a minimum):

- Introduction to the project;
- National and international consultation and engagement requirements;
- Summary of engagement activities undertaken;
- Stakeholder identification and analysis;
- Tools, techniques and record management;
- Stakeholder engagement issues;
- Planned stakeholder engagement program;
- Resources for implementing stakeholder engagement activities
- Roles and responsibilities; and
- Grievance Mechanism
- Monitoring and reporting;

Annex B: 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. The key labor risks which may be associated with the project (see, for example, those identified in ESS2). 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 (a). 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,

1. **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.

Annex 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

Annex D: Outline of Vulnerable and Indigenous Peoples Development Plan (VIPDP)

1. A summary of the Targeted Social Assessment, including the applicable legal and institutional framework and baseline data.
2. A summary of the results of the meaningful consultation tailored to IP, and if the project involves the three circumstances (i.e. involving impacts on land, livelihood, cultural heritage and requiring relocation), then the outcome of the process of FPIC carried out with the affected IP during project preparation.
3. A framework for meaningful consultation tailored to IP during project implementation.
4. Measures for ensuring IP receive social and economic benefits that are culturally appropriate and gender sensitive and steps for implementing them. If necessary, this may call for measures to enhance the capacity of the project implementing agencies.
5. Measures to avoid, minimize, mitigate, or compensate IP for any potential adverse impacts that were identified in the social assessment, and steps for implementing them.
6. The cost estimates, financing plan, schedule, and roles and responsibilities for implementing the Plan.
7. Accessible procedures appropriate to the project to address grievances by the affected IP arising from project implementation (Refer to paragraph 35 of ESS7 and in ESS10).
8. Mechanisms and benchmarks appropriate to the project for monitoring, evaluating, and reporting on the implementation of the Plan, including ways to consider input from project-affected IP in such mechanisms.