## Expertise requirement: Engineering consulting services will include, but are not limited to the following expertise:

Key Experts	Qualification	Minimum Experience
Team Leader/ Project Manager (International)	M.Sc. in Electrical/Power Engineering	Team Leader shall at least have (20) years of professional experience in the related field. Must have experience in a multidisciplinary Team conducting Feasibility Study, Topographic survey, Route Survey, ESIA & RAP in power sector projects (preferably in 245kV or higher voltage transmission line and substation projects).  Experience of leading a consultants' team as Project Manager or Deputy Project Manager: 5 projects (at least two as PM) with at least two (2) projects outside home country.
		Must have experience of working in at least 01 WB funded relevant study i.e. must have completed 1 study following WB ESF framework.  Excellent knowledge of English language for coordination and technical report writing skills; Experience working in Europe/USA/Canada/Japan/Australia will get preference.
Power System Analyst (International)	B. Sc. in Electrical/Power Engineering	Must have at least 15 years of experience in the relevant Field out of which at least two (2) years of experience as a consultant engineer for 245kV or above voltage level in power system planning and analysis.  Candidates with a Master's Degree in Electrical/Power Engineering from any reputed
		university are preferable.  Proven experience and proficiency in using power system transmission planning simulation software and preferably PSS/E are mandatory.  Experience working in Europe/USA/Canada/Japan/Australia will get preference.
Sub-station Engineer	B. Sc. in Electrical	Excellent knowledge of the English language for coordination and technical report writing skills.  Must have at least 15 years of experience in the

Key Experts	Qualification	Minimum Experience
(International)	Engineering	relevant field out of which at least five (5) years of experience as a consultant engineer for 245kV or above voltage GIS and AIS substation designing and implementation projects and at least 03(three) projects experience to work as a consultant engineer for the high voltage substation designing project outside home country.  Should be fluent in the English language for day-to-day communication.  Experience working in Europe/USA/Canada/
		Japan/Australia will get preference.
Sub-station Engineer (National)	B. Sc. in Electrical Engineering	Must have at least 10 years of experience in the relevant field out of which at least five (5) years of experience for 245kV or above voltage GIS and AIS substation designing and implementation projects.
		Should be fluent in the English language for day-to-day communication.
Transmission Line Engineer (International)	B. Sc. in Civil/ Mechanical/Electrical Engineering	Must have at least 15 years of experience in the relevant field out of which at least five (5) years of experience as a consultant engineer for 245kV or above voltage transmission line designing and implementation projects and at least 03(three) projects experience as a consultant engineer for transmission line designing and implementation project outside home country.
		Should be fluent in the English language for day-to-day communication.
		Experience working in Europe/USA/Canada/ Japan/Australia will get preference.
Transmission Line Engineer (National)	B. Sc. in Civil/ Mechanical/Electrical Engineering	Must have at least 10 years of experience in the relevant field out of which at least five (5) years of experience for 245kV or above voltage transmission line designing and implementation projects.
		Should be fluent in the English language for day-to-day communication.
Civil Engineer (Transmission Line & Substation)	B. Sc. in Civil Engineering	He must have at least 15 years of experience in the relevant field out of which at least five (5) years of experience as a consultant engineer for designing

Key Experts	Qualification	Minimum Experience
International expert		and implementing 245kV or above voltage transmission line & substation projects and at least two (2) projects experience as a consultant engineer for transmission line & substation project outside home country.
		Should be fluent in the English language for day-to-day communication.  Experience working in Europe/USA/Canada/Japan/Australia will get preference.
Civil Engineer (Transmission Line & Substation) National expert	B. Sc. in Civil Engineering	Must have at least 10 years of experience in the relevant field out of which at least five (5) years of experience for designing and implementing 245kV or above voltage transmission line & substation projects
		Should be fluent in the English language for day-to-day communication.
Route Survey Expert (National)	Bachelor's Degree in Civil Engineering/ Urban & Regional Planning	10 years of total Experience in conducting Route surveys, land surveys, and GIS Mapping. He/She shall have practical experience in conducting route surveys of at least 3 no's Projects (Minimum 500 km) of 132 kV and above High Voltage transmission system. Must have good communication skills, acquainted with the technical terminology of the survey.
Environmental Expert (National)	Master's Degree in Environmental Science or Equivalent	He/ She must have a Master's Degree in Environment Science/ Environmental Engineering / Environmental Management /Natural Resource Management /Biology/ Zoology/ Botany/Ecology with a Total of 15 years of Experience in related areas and shall have additional experience in OHS management in Projects. He /She shall have practical experience in conducting ESIA, ESMF, LMP, BMP etc at least 5 nos. Projects in the power sector of which at least two High Voltage Transmission Line Projects as an Environmental Expert.
		International Certification in Health & Safety is desirable
		Must have experience of working in at least 01 WB funded relevant study i.e. must have completed 1 study following WB ESF framework.
Social Development and Gender Expert	Master's Degree in social science or	He/ She must have more than ten (10) years of professional experience in the related field. The

Key Experts	Qualification	Minimum Experience
(National)	gender studies or related studies	expert shall have intensive experience in preparation of GAP, SEA/SH prevention plan, LMP, SEP or related document. The professional shall have experience in similar studies of the Power Sector related projects (preferably in high voltage transmission line projects).  Must have experience of working in at least 01 WB funded relevant study i.e., must have completed 1 study following WB ESF framework.
Socio-Economist/ Resettlement Experi (National)	Master's Degree in Economics/ Sociology	He/ She must have at least ten (10) years of professional experience in the related field. He /She shall have practical experience in conducting RAP, RPF, SEP etc at least 5 nos. Projects in the power sector /High Voltage Transmission Line Projects as Socio-Economist/ Resettlement Expert. The expert shall have experience in works related to the preparation of the Stakeholder Engagement Plan as per World Bank's guidelines.  Must have experience of working in at least 01 WB funded relevant study i.e. must have completed 1 study following WB ESF framework.
Financial Expert (National)	MBA/ Master's Degree in Finance Major	10 years of professional experience. He /She shall have practical experience in conducting at least 5 nos. Projects in the power sector /High Voltage Transmission Line Projects as Financial Expert.

- The Consultant may add personnel in their required staffing pool to accomplish the assignments, but they will not be accounted for evaluation.
- International Certification in Health & Safety is desirable for International Consultants.
- The key experts should have expertise in the Environmental and Social Framework launched by the World Bank on October 1, 2018.

The consulting firms are requested to submit end-user certificates as evidence of experiences as per requirement. The method of selection of consulting firms is "Quality and Cost Based Selection (QCBS)" (80:20).