



UTTARAKHAND TOURISM DEVELOPMENT BOARD (UTDB)
PT DEEN DAYAL UPADHYAY PARYATAN BHAWAN
NEAR ONGC HELIPAD, NIMBUWALA.
GARHI CANTT. DEHRADUN-248003
PH 01-135-2559898.

No.

Dated February 25, 2020

Invites Expression of Interest for Selection of Independent Engineer (IE) for construction supervision of Dehradun Mussoorie Ropeway Project

Uttarakhand Tourism Development Board invites online submission of EXPRESSION OF INTEREST (EOI) for Short listing/ prequalification of Independent Engineer (IE) for vetting of construction drawings & supervision of “Construction of Dehradun Mussoorie ropeway” through E-Procurement. The Independent Engineering Firm/Consortia will provide services for detailed review of ropeway design, construction drawings including the geo-technical investigations, construction methodology, Quality assurance procedures, monthly progress reports etc. The IE will also be responsible for Quality Checks during Execution Phase & System Testing for Commissioning according to the Specifications and Standards. The Independent Engineer should be certified by the CEN / European/ Canadian/ American Standard Code Organizations. The detailed EOI document including the Terms of Reference can be downloaded from the web sites of Govt of Uttarakhand / UTDB www.uktender.gov.in / www.uttarakhandtourism.gov.in. Any addendum / corrigendum including any date extension and clarifications will be uploaded on www.uktenders.gov.in and will not be published in newspapers. Hence, interested firms/ Independent Engineers should regularly visit this website to keep them abreast with the latest developments.

They should submit the relevant documents to demonstrate / evidence that they are eligible and have necessary capability to execute the work, if awarded.

Expression of interest (EOI) must be submitted online through www.uktenders.gov.in. The Expression of Interest (EOI) should be submitted not later than 15.00 hrs on 25.03.2020 which will be opened the same day at 15.30 hrs in presence of the representatives of the bidders

In case of any queries / clarifications on the project / documents please contact,

Project Authority: Mr. S S Samant Uttarakhand Tourism Development Board (UTDB) Pt. Deendayal Upadhaya Paryatan Bhawan, Near ONGC Helipad, Garhi Cantt, Dehradun Telefax.: 0135-2559988 Mobile: 9411112485 e-mail: utdbplanning@gmail.com	Project Advisors: Mr. Sunil Kumar Jain Uttarakhand Infrastructure Projects Company (UIPC) 88 - Govind Nagar, Race Course, Near PNB, Dehradun 248 001 Telefax: 0135-2627275 Mobile: 9412051506 e-mail: skjain54@gmail.com
---	--

**Uttarakhand Tourism Development Board (UTDB)
Pandit Deen Dayal Upadhaya Paryatan Bhawan
Near ONGC Helipad, Garhi Cantt- Dehradun**

Invitation of **Expression of Interest** for Independent Engineer for the work of "Development of Passenger Ropeway System between Dehradun (Purkul) and Mussoorie in Dehradun District on Design, Build, Finance, Operate and Transfer Basis under PPP Model"

1. Uttarakhand Tourism Development Board (UTDB) is engaged in the development of tourism infrastructure in the State of Uttarakhand. It has decided to undertake development of aerial passenger ropeway between Dehradun and Mussoorie on Design, Build, Finance, Operate and Transfer (the "DBFOT") basis under PPP Mode in accordance with the terms and conditions set forth in the Concession Agreement. As the concession agreement has been signed, UTDB intends to appoint the Independent Engineer.
2. As per Concession Agreement, UTDB invites expressions of interest from consulting firms or bodies, corporate to undertake and perform the duties and functions of Independent Engineer and there upon shortlist qualified firms in accordance with pre-determined criteria for the Dehradun Mussoorie ropeway. UTDB shall convey the aforesaid list of firms to the Concessionaire for scrutiny and comments, if any.
3. Thereafter, UTDB shall invite from the aforesaid firms in the Panel of Firms to submit their respective financial offers online. The financial bids in respect of such firms shall be opened and the order of priority as among these firms shall be determined on the basis of the lowest financial offer.
4. UTDB proposes to prepare a short-list of Firms to act as Independent Engineer for implementing the following project:

S. No	Location	Project name	Total Project cost (in Rs Crores)	Construction period
1	Uttarakhand	Development of Dehradun – Mussoorie Ropeway on Design, Build, Finance, Operate and Transfer Basis under PPP Model	285.00	3 Years

The interested firm may apply for the Project based on their eligibility as per eligibility criteria mentioned in Annexure 'IV'.

5. As per the terms and conditions of the Concession Agreement, the Independent Engineer is required to (i) independently and on behalf of both

the UTDB and the Concessionaire to review activities associated with design, design review, construction and operation & maintenance of the project to ensure compliance of requirements of Concession Agreement, technical aspects of the project,

6. UTDB now invites eligible consulting firms/ companies for Expression of Interest for Independent Engineer for discharge of the duties as mentioned above.

7. **Other Terms**

- i. Any entity which has been barred by the Central Government, any State Government, a statutory authority or a public sector undertaking, as the case may be, from participating in any project, and the bar subsists as on the date of Proposal, would not be eligible to submit a Proposal either by itself or through its Associate.
- ii. An Applicant or its Associate should have, during the last three years, neither failed to perform on any agreement, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial pronouncement or arbitration award against the Applicant or its Associate, nor been expelled from any project or agreement nor have had any agreement terminated for breach by such Applicant or its Associate.
- iii. At any time before the submission of Expression of Interest, the Authority may, whether at its own initiative or in response to a clarification requested by a potential Service Provider, amend the EOI by issuing an Addendum / Corrigendum, which shall be uploaded on website www.uktenders.gov.in only and also may extend the deadline for submission of Expressions of Interest.
- iv. To assist in the process of evaluation of EOIs, UTDB may, at its sole discretion, ask any Bidder for clarification including additional information and documents. In case of any additional documents, same will be accepted only if they are of historical nature i.e., either the documents or facts in the documents should have existed prior to be EOI submission time and same could be verified independently. However, no change in the substance of the EOI would be permitted by way of such clarifications. The request for clarification and the response shall be in writing or e-mail or by facsimile.
- v. Right to reject any or all Expressions of Interest: Notwithstanding anything contained in this document, the Authority reserves the right to accept or reject any EOI and to annul the Selection Process and reject all EOIs, at

any time without any liability or any obligation for such acceptance, rejection or cancellation.

- vi. The Authority reserves the right to reject any Expression of Interest, if
 - a. At any time, a material misrepresentation is made or uncovered, or
 - b. The Firm/ Independent Engineer do not provide, within the time specified by the Authority, the supplemental information sought by the Authority for evaluation of the Expressions of Interest.
 - vii. With regard to interpretation of provisions in this document and Consultants' responsiveness, the interpretation and decision of the Consultants Selection Committee shall be final and binding on all bidders
8. Based on relevant experience of project monitoring, construction supervision, contract management, etc., as detailed in LOI, UTDB will shortlist the firms on the basis of technical capabilities and prepare a panel of Firms which will be valid for the above mentioned project. Financial Proposals will be invited from the Firms out of the panel so formed. The maximum period for the assignment as Independent Engineer will be upto 36 months for the project which may be extended further. It is proposed to invite the Financial Proposals from short-listed Firms only.
- 9. SUBMISSION AND OPENING OF PROPOSALS**
- i. The Bids should be submitted online only as specified in the Tender document. The Bids will not be received personally or by post.
 - ii. Bids will be received only by online mode through the website: <https://www.uktenders.gov.in>
 - iii. An authorized representative of the firm shall initial all pages of the Proposal. The representative's authorization in original/ notarized will be confirmed by a written Power of Attorney accompanying the Proposal.
 - iv. Consultants shall submit one sealed envelope containing EOI-cum-TOR Cost (Through Demand Draft in favour of the CEO, UTDB, payable at Dehradun), Affidavits & Bid Submission Acknowledgement etc. as per EOI Document.
 - v. Completed proposal must be delivered at the Submission address mentioned on or before the time and date stated in this EOI Document and be clearly marked "Expression of Interest for Independent Engineer for Development of Passenger Ropeway System between Dehradun & Mussoorie in Dehradun District on Design, Build, Finance, Operate and Transfer Basis under PPP Model".

- vi. Any proposal received after the closing time for submission of the proposals shall be returned unopened.
10. TECHNICAL EVALUATION OF PROPOSALS
- i. Technical Evaluation shall be carried out by the Evaluation Committee appointed by UTDB, on the basis of their responsiveness to the Terms of Reference, applying the evaluation criteria, and point system specified in the Data Sheet. applying the eligibility criteria, evaluation criteria and point system specified in the Annexure V. Firms securing the qualifying marks mentioned in Annexure V shall be shortlisted and a panel of shortlisted firms shall be prepared.
 - ii. The Evaluation Committee appointed by UTDB shall carry out its evaluation Each responsive proposal will be given a technical score (St.) A proposal shall be rejected at this stage if it does not respond to important aspects of the Terms of Reference or if it fails to achieve the minimum technical score .The Technical Proposal should score at least 75% marks to be considered responsive for short listing the firm for submission of financial proposal.
 - iii. After the evaluation of the technical proposal is completed, the Client may notify those consultants whose proposals were considered non-responsive to the EOI-cum-TOR, indicating that they are not eligible for submission of Financial Proposal, the Authority shall simultaneously notify the Consultants that have secured the minimum qualifying mark, indicating the date and time for submission of the Financial Proposals. The submission date should allow Consultants sufficient time for preparing the financial proposal.
11. Further information can be obtained at the following address.
- Address for Communication:
S S Samant,
Senior Research Officer,
Uttarakhand Tourism Development Board,
Pt. Deen Dayal Upadhaya Bhawan,
Near ONGC Helipad, Garhi Cantt
Dehradun
Mob No:-9411112385,
E-mail- utdbplanning@gmail.com

Letter of Invitation (LOI)

No. _____ Dated: _____

To

Sub: Expression of Interest for Independent Engineering Services for the Supervision work of construction of Passenger Ropeway System between Dehradun & Mussoorie in Dehradun District on Design, Build, Finance, Operate and Transfer Basis under PPP Model”–Letter of Invitation.

Dear Sir,

UTDB, Government of Uttarakhand is engaged in the development of tourism infrastructure and in order to enable more efficient use of public resources, it has taken the decision to support the development of tourism infrastructure in the State through Public-Private-Partnership (PPP) route. As part of this endeavor, it has decided to undertake development of Aerial Passenger Ropeway between Dehradun & Mussoorie on Design, Build, Finance, Operate and Transfer (the "DBFOT") basis under PPP Mode in accordance with the terms and conditions set forth in the Concession Agreement. UTDB shall be the nodal agency for the implementation of the Project. UTDB now intends to short-list eligible consulting firms who have proven experience for Independent Consultant/Construction Supervision on ropeway projects to act as an Independent Engineer (IE). In order to carry out the implementation of above project, UTDB will engage eligible consulting firms to act as an Independent Engineer.

- 1 The applicant must have an experience for design and supervision of ropeways designed and constructed with CEN/ Canadian / American or European Standards.
2. The applicant should have an experience as specified in Annex-IV. Experience of project supervision in projects that have been substantially completed (not less than 90% of Contract value) shall be considered towards qualifying experience.

3. The Net worth of the applicant / consortium should be minimum INR 2.00 Crores
4. Only those Firms who satisfy above minimum eligible criteria need apply. Client certificates shall be required for experience in Project Management Consultancy / Project Supervision / Ropeway project O and M / Independent Consultant / Independent Engineer. In case a consulting engineering firm claims experience for a project undertaken as a member of JV, the particular firm's position in the JV needs to be clearly brought out in the Clients' certificate or in a supporting sheet by the firm itself.
5. The duration of the services will be required over a period of about 36 months.
6. The Short-listing of Independent Engineer shall be done based on the marks obtained by the firm after evaluation of firm's experience, credential etc. The points assigned for evaluation criteria have been given in Annex-V.
7. Instructions for submission of the expression of interest are enclosed at Annex-I and guidelines for the preparation for the Expression of Interest is enclosed at Annex-II. Eligible Consulting firms interested in short-listing for Independent Engineer should fill up the enclosed Expression of Interest form (Annex- III) and submit together with a Letter of INTENT (LoI) so as to reach our office not later than 1500 hrs. on 25.03.2020.
8. A non-refundable processing fee of Rs 10,000/- (Rupees Ten Thousand only) in form of demand draft in favor of "CEO, Uttarakhand Tourism Development Board" payable at Dehradun must be submitted along with the Expression of Interest. Expression of Interest received without the said processing fee shall be summarily rejected.

Yours sincerely,

(Dilip Jawalkar)
CEO, UTDB
Uttarakhand Tourism Development Board,

Encl.:- As above

Uttarakhand Tourism Development Board (UTDB)

Instructions for Submission of Expression of Interest Statement

1. Accomplished Expression of Interest statement must be submitted together with a Letter not later than 1500 hrs. on 25.03.2020.
2. The Expression of Interest document shall be the basis of drawing up a shortlist of Firms who will be invited to submit financial proposals for the services required.
3. All applications shall be submitted in English.
4. Power of Attorney (on stamp paper and duly notarized) of the person submitting the Expression of Interest on behalf of the applicant / consortium shall be attached.
5. The short-listing of the Firms shall be done for the Project in consultation with the Concessionaire as per the TOR attached with EOI.
6. Completed Expression of Interest along with enclosures should be hard bound, page numbered and initialed on each page. Loose Expression of Interest shall be treated as non-responsive.
7. The Consulting Firms which have been associated in any way with the Project(s) as mentioned in this EOI document shall not be eligible to participate in the bid for the particular project / projects.
8. Submission must be addressed to the following:

Dilip Jawalkar, IAS
Chief Executive Officer,
Uttarakhand Tourism Development Board,
Pt. Deen Dayal Upadhaya Bhawan,
Near ONGC Helipad, Garhi Cantt
Dehradun
Mob No:-9068876969,
E-mail- utdbplanning@gmail.com

GUIDELINES FOR PREPARATION OF EXPRESSION OF INTEREST

Expression of Interest Statement for Independent Engineer, interested to be considered for the services contemplated shall fill up the enclosed form in duplicate (Original and Copy). The numbers below correspond to the numbers contained in the enclosed form (Annex-III):

1. The Short-listing of Firms shall be done based on the marks obtained by the firm after evaluation of firm's experience, credential etc.
2. Complete name of firm, date of establishment and type of organization whether individual, proprietorship, partnership, private limited company, limited company etc.
3. Name of affiliate firms, their years of establishment, countries of origin and type of organization.
4. Exact and complete home office address, business address, telephone number, Fax number, E-mail and cable address. For consulting firms of foreign registry, indicate if there is any branch office(s) established in India with details in the aforesaid manner.
5. If present firm is the successor to or outgrowth of one or more predecessor firms, fresh name(s) of former entity (ties) and the year(s) of their original establishment. Information is to be furnished by the applicant.
6. Present a brief narrative description of the firm.
7. List not more than two (2) principals who may be contacted by this Office. Listed principals must be empowered to speak for the firm on policy and contractual matters.
8. Indicate the number of employees by discipline. While some personnel may be qualified in several disciplines, each person should be counted only once in accordance with his/her primary functions.
9. Under this item, indicate the financial figures from consultancy business for the last three (3) years. Gross fees received as Prime Consultant or in joint

venture with other consulting firms separately for design consultancy and supervision consultancy.

10. This item represents the completed Ropeway consultancy projects of the consultant and those handled in last ten (10) years. The first column represents the list of all eligible projects. The second column represents the name of the project started and how it was accomplished, i.e., as Prime Consultant or through joint venture or as an associate with other Consultants. If it was implemented as an associate with other consultant, indicate name of the consultant. Third column represents the consulting services rendered, defined as clearly as possible. Fourth column represents cost of project. Fifth column represents the Client whom the services were rendered and the address of the Client. Sixth and seventh column represents the fee received by the Consultant and the last column represents the duration of services. The fee should be stated in Indian Rupees. For the purposes of technical evaluation of Applicants, [Rs. 71 (Rupees seventy one)] per US\$ shall be considered as the applicable currency conversion rate. In case of any other currency, the same shall first be converted to US\$ as on the date 60 (sixty) days prior to the Proposal Due Date, and the amount so derived in US\$ shall be converted into INR at the aforesaid rate. The conversion rate of such currencies shall be the daily representative exchange rates published by the International Monetary Fund for the relevant date. Attach services completion certificates or any equivalent proof to substantiate the experience. The firm should furnish the project-wise supporting statement which best illustrates the experience of the firm relevant to the project.
11. List of minimum essential equipment which the firm must possess for eligibility.

EXPRESSION OF INTEREST FORM FOR CONSULTING FIRM

1. Alignments for which this application is to be considered:

Location	Project Name
Dehradun (Uttarakhand)	Development of Passenger Ropeway System between Dehradun & Mussoorie on Design, Build, Finance, Operate and Transfer Basis under PPP Model

2. & 3

Firm	Established Year	Country	Type of organization			
			Individual	Partnership	Corporation	Other
2.-Name						
3.- Affiliated Firms						

4. Office / business address / telephone nos. / cable address
5. Consulting engineering / architect firms former name and year establishment
6. Narrative description of firms (use other sheet, if necessary)
7. Name of, not more than two (2) principals who may be contacted with title and telephone number / fax number
8. Number of personnel in the organization

DISCIPLINE		NUMBER	
KEY PERSONNEL	Experience >10 years	Experience between 5 to 10 years	Experience in execution of PPP Projects
Ropeway Engineer			

9. FINANCIAL STATEMENT OF THE LAST THREE FINANCIAL YEARS

S. No.	Particulars	2018-2019	2017-2018	2016-2017
I.	Annual turnover from ropeway projects PMC / Supervision / Independent Engineer business			
II.	Net Payment			
III	Net Worth of the Consultant / consortium			

10. ROPEWAY PROJECTS HANDLED BY THE CONSULTING FIRMS DURING THE LAST TEN YEARS

(Only those projects be included, which are supported by the certificate of the clients mentioning that the consultancy work has been completed satisfactorily or has been substantially completed in case of project supervision works (substantial completion means 90% work in financial value having been executed) satisfactorily.

S. No.	Projects Name & Year	Type of Project execution/ PMC Services/ Rendered including Independent Consultant/ Independent Engineer	Cost of Project (INR Cr)	Client (with complete address, contact person, telephone Nos. and Fax Nos.)	Standard followed for design / Construction of Ropeway e.g. CEN/ European/ Canadian/ American/ BIS	Fee in INR (Applicant's share in case of JV)	Duration
						Fee for Project Supervision / IC / IE	
1	2	3	4	5	6	7	8

B1 – Project Supervision/Independent Consultant (IC)/Independent Engineer (IE) of Ropeway Projects costing less than INR 105 Crores

B2 – Project Supervision/ IC/IE of Ropeway Projects costing more than INR 105 Crores

Supporting Statements to Clients' certificates may be furnished giving full details of the projects carried out as below:

Name of the Project: _____

Location of the Project: _____
 Owner's Name and Address: _____
 Completion (Actual and Estimated) : _____
 Description of Project: _____
 Description of Services Provided by the Firm:

List of minimum essential equipment which the firm must possess for eligibility

Details	No. of sets
I. Office Equipment <ul style="list-style-type: none"> • Computer • Printer / Plotter 	

I certify that the information in the above Expression of Interest forms is true to the best of my knowledge.

PRESIDENT / MANAGING DIRECTOR
 OR
 AUTHORIZED SIGNATORY#

SUBSCRIBED AND SWORN to before me this _____ date of _____, 20____ at _____.

NOTARY PUBLIC

Please attach Power of Attorney as described or valid authorization.

ELIGIBILITY CRITERIA

1. The eligibility criteria in respect of experience of firms have been mentioned below:

A. Minimum Eligibility Criteria for applicant firm

S. No.	Experience of the firm during last 10 years in	Annual Turnover*	Net Worth
	Project Supervision / Independent Consultant / Independent Engineer		
1	(A) The firm should have minimum experience of PMC/ Project Supervision / Independent Consultant / Independent Engineer of ropeway Project with aggregate cost of INR 200 Crores or more. AND (B) Firm should also have experience of Project Supervision / Independent Consultant / Independent Engineer of at least one Ropeway Project of Cost INR 200 Crores or more or two ropeway Projects of cost INR 105 Crores	Annual turnover (average of last 3 years) of the firm should be equal to or more than INR 1.0 Crore.	Minimum Net worth of the applicant on the last day of last financial year should be INR 2.0 Crores

* Annual Turnover should be duly certified by statutory body like Chartered Accountant or Independent Auditors who are competent to do so as recognized by the applicable law.

Note: The weightage given for experience of a firm would depend on the role of the firm in the respective assignments. The firm's experience would get full credit if it was the sole firm in the respective assignment. In case it was a lead firm, it would get 75% weightage and if it was the other partner in a Consortium of two firms, it would get 50% weightage; for the respective assignment. The above weights are reflected in the following table:

S. No.	Status of the firm	Weightage for experience
1.	Sole firm	100%
2.	Lead partner in a JV	75%
3.	Other partner in a JV	50%

3. List of minimum essential equipment which the firm must possess for eligibility:

Details
<p>I. Office Equipment</p> <ul style="list-style-type: none"> • Computer - 2 Nos. • Printer / Plotter –Printer 2 Nos, Plotter – 1 No

POINTS ALLOCATED FOR EVALUATION CRITERIA

S. No.	Description	Maximum Marks
1	Year of Establishment of Firm Less than 3 Years: 3 Marks More than 3 Years but less than 5 Years: 6 marks More than 5 Years: 10 marks	10
2	Average Annual Turnover from PMC/ Project Supervision / Independent Consultant / Independent Engineer Services (last three years) More than INR 1.0 Crore but less than INR 2.0 Crores: 6 marks More than INR 2.0 Crores but less than INR 3.0 Crores: 8 marks More than INR 3.0 Crores: 10 marks	10
3	Number of Key personnel Ropeway Engineer 4.0 marks for personal with Experience >10 years 3.0 marks for personal with Experience between 5 to 10 years	10
4	Experience of the firm in Project Supervision / Independent Consultant / Independent Engineer of Ropeway Project during the last 10 years with aggregate project cost of: More than INR 105 Cr but less than INR 125 Cr: 30 marks More than INR 125 Cr but less than INR 150 Cr: 50 marks More than INR 150 Cr: 60 marks [20 additional marks in case firm has Project Supervision/ IC/ IE experience of ropeway constructed as per CEN Standards in India subject to maximum of 70 marks]	70
TOTAL		100

The firms should score at least 75 marks for qualifying to the next stage.

SCHEDULE – I
(Concession Agreement)

I. SELECTION OF INDEPENDENT ENGINEER

1. Selection of Independent Engineer

1.1 The provisions of the Model Request for Proposals for selection of technical consultants, issued by the Ministry of Finance, Government of India vide OM 24(23)/PF-II/ 2008 dated 21, May 2009, or any substitute thereof shall apply for selection of an experienced firm to discharge the functions and duties of an Independent Engineer provided it is certified by the Bureau of Indian Standards or any International Standard Organization such as American or European or Canadian or CEN Standard Organization applicable for Rope Ways. Provided, however, that no entity which is owned or controlled by the Authority shall be eligible for appointment as the Independent Engineer.

1.2 In the event of termination of an Independent Engineer appointed in accordance with the provisions of Paragraph 1.1, the Authority shall appoint another firm of technical consultants forthwith or may engage a government-owned entity in accordance with the provisions of Paragraph 5 of this Schedule-I.

1.3 The Concessionaire may, in its discretion, nominate a representative to participate in the process of selection to be undertaken by the Authority under this Schedule-I.

2. Terms of Reference

2.1 The Terms of Reference for the Independent Engineer shall substantially conform with Annex-1 to this Schedule-I.

4. Selection every three years

4.1 No later than 3 (three) years from the date of appointment of the Independent Engineer, in accordance with the provisions of Paragraph 1 of this Schedule-I, the Authority shall engage another firm in accordance with the criteria set forth in this Schedule-I.

5. Appointment of government entity as Independent Engineer

5.1 [Notwithstanding anything to the contrary contained in this Schedule – I, the Authority may in its discretion appoint a government-owned entity as the Independent Engineer; provided that such entity shall be a body corporate having as one of its primary function the provision of consulting, advisory and supervisory services for engineering projects and shall be accredited and/or approved by the Bureau of Indian Standard or any International Standards Organization (American / European or Canadian or CEN) for Ropeways or enter into an agreement with an agency which is accredited and/or approved by the Bureau of Indian Standard or any International Standards Organization (American / European or Canadian or CEN) for Ropeways; provided further that a government- owned entity which is owned or controlled by the Authority shall not be eligible for appointment as an Independent Engineer.]

6.0 Liability of Independent Engineer

6.1 Notwithstanding anything contained herein, the Independent Engineer understands and acknowledges that time is an essence of this Agreement. The Concessionaire shall intimate the Authority, if there is any delay caused due to the failure of the Independent Engineer to adhere to the time lines stipulated in this Agreement. The Authority, upon being intimated by the Concessionaire, of such delay, shall impose such penalty upon the Independent Engineer, as it may deem fit. For avoidance of doubt, it is hereby clarified that any loss accrued to the Concessionaire on account of negligence of the Independent Engineer and/or delay to fulfil its obligation(s), shall also be recovered, by the Authority, on behalf of the Concessionaire.

II. TERMS OF REFERENCE FOR INDEPENDENT ENGINEER

1. Scope

- 1.1 These Terms of Reference for the Independent Engineer (the “**TOR**”) are being specified in accordance with the Concession Agreement (the “**Agreement**”), which has been entered into between the Authority and the “**Concessionaire**” for Dehradun- Mussoorie Ropeway in the city of Dehradun. on design, build, finance, operate and transfer (the“**DBFOT**”) basis.
- 1.2 This TOR shall apply to construction, operation and maintenance of the Dehradun- Mussoorie Ropeway, and shall apply, *mutatis mutandis*, to system augmentation thereof. The TOR for the appointment of the Independent Engineer will be as follows:

2. Terms for Reference for Test Standards and Other Documentation

- 2.1 The latest Indian / International Standards applicable in India, American or European or Canadian or CEN will be applicable for test standards as per the technology adopted.

The inspection is based on the following regulations and directives:

- (i) Testing and inspection will be carried out mainly based on the technical and procedural standards of the BIS/ European/Canadian /American / CEN code.
- (ii) The technical partner/equipment supplier will provide relevant equipment related technical details regarding their equipment to the Indian / International Safety Standards such as American or European or Canadian or CEN, certified auditor to cover the following scope:
1. Scope of examination
 2. Hydraulic
 3. Review of confirming documents and certificates
 4. Inspection of the rope guidance, pre-tensioning, rope clearance
 5. Inspection of the tensioning device
 6. Inspection of the professional installation of the safety relevant components

7. Inspection of the cables and the cable connections
8. Inspection of the line equipment
9. Inspection of the carriers/vehicles including clamping device
10. Inspection of the cabin door system
11. Validation of the safety functions
12. Validation of safety functions recovery drives
13. Adjustment of the brakes
14. Adjustment of the grip force monitoring
15. Trial runs regarding main drive operation
16. Trial runs regarding recovery drives
17. Trial runs regarding braking performance
18. Trial runs regarding anti-collision monitoring
19. Safety signatures

3. Definitions and Interpretation

- 3.1 The words and expressions beginning with or in capital letters used in this TOR and not defined here in but defined in the Agreement shall have, unless repugnant to the context, the meaning respectively assigned to them in the Agreement.
- 3.2 References to Articles, Clauses and Schedules in this TOR shall, except where the context otherwise requires, be deemed to be references to the Articles, Clauses and Schedules of the Concession Agreement, and references to Paragraphs shall be deemed to be references to Paragraphs of this TOR.

The rules of interpretation stated in Clauses 1.2, 1.3 and 1.4 of the Concession Agreement shall apply, mutatis mutandis, to this TOR.

4. Role and functions of the Independent Engineer

- 4.1 The role and functions of the Independent Engineer shall include the following:

The BIS / International Standard (American or European or Canadian or CEN) Certified entity will test Dehradun- Mussoorie Ropeway as per the following scope spread over the stages of installation:

Phase 1: Design Checking of Ropeway

- Counterproof of the design and the project of the supplier;
- Design and technology check of the planning documents of the supplier, including design check of all drawings according to the BIS or International Standard Codes (such as American or European or Canadian or CEN codes) and according to the contract (Scope of supply of the ropeway supplier);
- Check of all descriptions, safety analysis;
- Counter proof of the line calculation according to relevant Country Codes / Standards with an Independent line calculation software;
- Counter proof of all static calculations of the steel parts and concrete works of the ropeway according to the relevant Codes of the Standard Organization Country;
- Check of all safety reports (technical studies of Schedule D viz. geological report, meteorological report, etc.);
- Final detailed project report (DPR); and
- One site visits to check the local situation.

Phase 2: Quality Check during Execution Phase

Check and control of the quality of the execution of the ropeway on site, monitoring of the time schedule, factory acceptance test. In detail this phase will include following items:

- To monitor contractor's supervision of the construction activities as per predetermined inspection test plan;
- Quality planning and quality assurance;
- Quality check and final approval of the ropeway foundations;
- Check of the correct position of all anchor frames and foundation positions;
- Quality check of the foundation reinforcement steel bars and concrete material;
- To review and approve construction schedules proposed & periodically updated by contractors;

- To review and approve contractors' method statement, erection procedures & work plans;
- To monitor quality of the work being executed through good engineering practices;
- Check of the correct assembly of all ropeway components; and
- Factory acceptance test of all ropeway components before dispatching to India.

Phase 3: System Testing for Commissioning of the System

After the internal tests of the supplier, the notified and accredited inspection body will do the final safety tests on the installation which includes:

- check of the correct execution and assembly of the ropeway;
- check the final documentation of the supplier including certificates and conformity declaration of all safety parts and subsystems;
- check all safety devices of the ropeway including the correct setting;
- check the electrical safety control system;
- check the correct settings of all brakes and drives;
- check the emergency drive;
- check the smooth and safe running of the rope and cabins on the line and on the roller batteries;
- check of the operation and maintenance manual;
- check the experience and the knowledge of the service staff for the operation;
- check the correct, safe and smooth running of:
 - (a) the garage system;
 - (b) the conveyer system; and
 - (c) the coupling system.
- check the rescue equipment and do a rescue exercise on the installation

Notified Body:

- Notified body according to the ropeway regulation of the Bureau of Indian Standards or / International Standards (American or European or Canadian or CEN) Organization;
- Accredited inspection & testing body according to the relevant Indian / Internationally Standards Organization / relevant Codes;
- All accreditations must be confirmed by a national accreditation body of India / International Standards Organization;
- At least one inspection engineer should have experience in the project engineering of ropeways; and
- The leading inspection engineers (at least two) should have at least 15 (fifteen) years of ropeway experience in ropeway engineering or/and ropeway inspection.

The Independent Engineer shall discharge its duties in a fair, impartial and efficient manner, consistent with the highest standards of professional integrity and Good Industry Practice.

4.2 Development Period

- 4.2.1 During the Development Period, the Independent Engineer shall undertake a detailed review of the Drawings to be furnished by the Concessionaire along with supporting data, including the geotechnical and hydrological investigations, characteristics of materials, topographical surveys and traffic surveys. The Independent Engineer shall complete such review and send its comments/observations to the Authority and the Concessionaire within 15 (fifteen) days of receipt of such Drawings. In particular, such comments shall specify the conformity or otherwise of such Drawings with the Scope of the Project and Specifications and Standards.
- 4.2.2 The Independent Engineer shall review any modified Drawings or supporting Documents sent to it by the Concessionaire and furnish its comments within 7 (seven) days of receiving such Drawings or Documents.
- 4.2.3 The Independent Engineer shall review the Drawings sent to it by the Safety Consultant in accordance with Schedule-M and furnish its comments thereon to the Authority and the Concessionaire within 7 (seven) days of receiving such Drawings. The Independent Engineer shall also review the Safety Report and furnish its comments thereon to the Authority within 15(fifteen) days of receiving such report.

- 4.2.4 The Independent Engineer shall review the detailed design, construction methodology, quality assurance procedures and the procurement, engineering and construction time schedule sent to it by the Concessionaire and furnish its comments within 15 (fifteen) days of receipt thereof.
- 4.2.5 The Independent Engineer shall review the detailed design, manufacturing, installation, testing and commissioning plans for the Dehradun- Mussoorie Ropeway sent to it by the Concessionaire and furnish its comments within 15 (fifteen) days of receipt thereof.
- 4.2.6 Upon reference by the Authority, the Independent Engineer shall review and comment on the EPC contract or any other contract for construction, operation and maintenance of the Dehradun- Mussoorie Ropeway and furnish its comments within 7 (seven) days from receipt of such reference from the Authority.

5. Construction Period

- 5.1 In respect of the Drawings, Documents and Safety Report received by the Independent Engineer for its review and comments during the Construction Period, the provisions of Paragraph 4 shall apply, mutatis mutandis.
- 5.2 The Independent Engineer shall review the monthly progress report furnished by the Concessionaire and send its comments thereon to the Authority and the Concessionaire within 7 (seven) days of receipt of such report.
- 5.3 The Independent Engineer shall inspect the construction works and electro-mechanical equipment(if any) once every month, preferably after receipt of the monthly progress report from the Concessionaire, but before the 20th (twentieth) day of each month in any case, and make out a report of such inspection (the “**Inspection Report**”) setting forth an overview of the status, progress, quality and safety of construction, including the work methodology adopted, the materials used and their sources, and conformity of Construction Works and electromechanical with the Scope of the Project and the Specifications and Standards. In a separate section of the Inspection Report, the Independent Engineer shall describe in reasonable detail the lapses, defects or deficiencies observed by it in the construction of the Dehradun-Mussoorie Ropeway or the deficiencies in the electromechanical equipment. The Independent Engineer shall send a copy of its Inspection Report to the Authority and the Concessionaire within 7 (seven) days of the inspection.
- 5.4 The Independent Engineer may inspect the Dehradun- Mussoorie Ropeway more than once in a month if any lapses, defects or deficiencies require such

inspections. In the event that the Concessionaire carries out any remedial works for removal or rectification of any defects or deficiencies, the Independent Engineer shall require the Concessionaire to carry out, or cause to be carried out, tests to determine that such remedial works have brought the Construction Works into conformity with the Specifications and Standards, and the provisions of this Paragraph 5 shall apply to such tests.

- 5.5 In the event that the Concessionaire fails to achieve any of the Project Milestones, the Independent Engineer shall undertake a review of the progress of construction and identify potential delays, if any. If the Independent Engineer shall determine that completion of the Dehradun-Mussoorie Ropeway is not feasible within the time specified in the Agreement, it shall require the Concessionaire to indicate within 15 (fifteen) days the steps proposed to be taken to expedite progress, and the period within which COD shall be achieved. Upon receipt of a report from the Concessionaire, the Independent Engineer shall review the same and send its comments to the Authority and the Concessionaire forthwith.
- 5.6 If at any time during the Construction Period, the Independent Engineer determines that the Concessionaire has not made adequate arrangements for the safety of workers and Users in the zone of construction or that any work is being carried out in a manner that threatens the safety of the workers and the Users, it shall make a recommendation to the Authority forthwith, identifying the whole or part of the Construction Works that should be suspended for ensuring safety in respect thereof.
- 5.7 In the event that the Concessionaire carries out any remedial measures to secure the safety of suspended works and Users, it may, by notice in writing, require the Independent Engineer to inspect such works, and within 3 (three) days of receiving such notice, the Independent Engineer shall inspect the suspended works and make a report to the Authority forthwith, recommending whether or not such suspension may be revoked by the Authority.
- 5.8 If suspension of Construction Works is for reasons not attributable to the Concessionaire, the Independent Engineer shall determine the extension of dates set forth in the Project Completion Schedule, to which the Concessionaire is reasonably entitled, and shall notify the Authority and the Concessionaire of the same.
- 5.9 The Independent Engineer shall carry out, or cause to be carried out, all the Tests specified in Schedule-I and issue a Completion Certificate.

- 5.10 For carrying out its functions under this Paragraph 5.10 and all matters incidental thereto, the Independent Engineer shall act under and in accordance with the provisions of Article 14 and Schedule-I.
- 5.11 Upon reference from the Authority, the Independent Engineer shall make a fair and reasonable assessment of the costs of providing information, works and services as set forth in Article 16 and certify the reasonableness of such costs for payment by the Authority to the Concessionaire. The Independent Engineer shall aid and advise the Concessionaire in preparing the Maintenance Manual.

6. Operation Period

- 6.1 In respect of the Drawings, Documents and Safety Report received by the Independent Engineer for its review and comments during the Operation Period, the provisions of Paragraph 4 shall apply, mutatis mutandis.
- 6.2 The Independent Engineer shall review the annual Maintenance Programme furnished by the Concessionaire and send its comments thereon to the Authority and the Concessionaire within 15 (fifteen) days of receipt of the Maintenance Programme.
- 6.3 The Independent Engineer shall review the monthly status report furnished by the Concessionaire and send its comments thereon to the Authority and the Concessionaire within 7 (seven) days of receipt of such report.
- 6.4 The Independent Engineer shall inspect the Dehradun- Mussoorie Ropeway, including cabins and stations, once every month, preferably after receipt of the monthly status report from the Concessionaire, but before the 20th (twentieth) day of each month in any case, and make out an O&M Inspection Report setting forth an overview of the status, quality and safety of O&M including its conformity with the Key Performance Indicators, Maintenance Requirements and Safety Requirements. In a separate section of the O&M Inspection Report, the Independent Engineer shall describe in reasonable detail the lapses, defects or deficiencies observed by it in O&M of the Dehradun- Mussoorie Ropeway. The Independent Engineer shall send a copy of its O&M Inspection Report to the Authority and the Concessionaire within 7 (seven) days of the inspection.
- 6.5 The Independent Engineer may inspect the Dehradun- Mussoorie Ropeway more than once in a month, if any lapses, defects or deficiencies require such inspections.

- 6.6 The Independent Engineer shall in its O&M Inspection Report specify the tests, if any, that the Concessionaire shall carry out, or cause to be carried out, for the purpose of determining that the Dehradun- Mussoorie Ropeway is in conformity with the Maintenance Requirements. It shall monitor and review the results of such tests and the remedial measures, if any, taken by the Concessionaire in this behalf. In respect of any defect or deficiency referred to in Paragraph 3 of Schedule - L, the Independent Engineer shall, in conformity with Good Industry Practice, specify the permissible limit of deviation or deterioration with reference to the Specifications and Standards and shall also specify the time limit for repair or rectification of any deviation or deterioration beyond the permissible limit.
- 6.7 The Independent Engineer shall determine if any delay has occurred in completion of repair or remedial works in accordance with the Agreement, and shall also determine the Damages, if any, payable by the Concessionaire to the Authority for such delay.
- 6.8 The Independent Engineer shall examine the request of the Concessionaire for closure of the Dehradun- Mussoorie Ropeway for undertaking maintenance/repair thereof, keeping in view the need to minimize disruption in traffic and the time required for completing such maintenance/repair in accordance with Good Industry Practice. It shall grant permission with such modifications, as it may deem necessary, within 3 (three) days of receiving a request from the Concessionaire. Upon expiry of the permitted period of closure, the Independent Engineer shall monitor the re-opening of such rope(s), and in case of delay, determine the Damages payable by the Concessionaire to the Authority under Clause 17.7.
- 6.9 The Independent Engineer shall monitor and review the curing of defects and deficiencies by the Concessionaire as set forth in Clause 19.4.
- 6.10 In the event that the Concessionaire notifies the Independent Engineer of any modifications that it proposes to make to the Dehradun- Mussoorie Ropeway, the Independent Engineer shall review the same and send its comments to the Authority and the Concessionaire within 15 (fifteen) days of receiving the proposal.

7. Audit of Fee collection system

- 7.1 The Independent Engineer shall, at least once every month, conduct an audit of the working of the automatic fee collection system installed by the Concessionaire, to check its accuracy in recording the entry and exit of Users and in recording the fee.

8. Termination

- 8.1 At any time, not earlier than 90 (ninety) days prior to Termination but not later than 15 (fifteen) days prior to such Termination, the Independent Engineer shall, in the presence of a representative of the Concessionaire, inspect the Dehradun- Mussoorie Ropeway for determining compliance by the Concessionaire with the Divestment Requirements set forth in Clause 38.1 of the Concession Agreement and, if required, cause tests to be carried out at the Concessionaire's cost for determining such compliance. If the Independent Engineer determines that the status of the Dehradun- Mussoorie Ropeway is such that its repair and rectification would require a larger amount than the sum set forth in Clause 39.2, it shall recommend retention of the required amount in the Escrow Account and the period of retention thereof.
- 8.2 The Independent Engineer shall inspect the Dehradun- Mussoorie Ropeway once in every 15 (fifteen) days during a period of 90 (ninety) days after Termination for determining the liability of the Concessionaire under Article 39, in respect of the defects or deficiencies specified therein. If any such defect or deficiency is found by the Independent Engineer, it shall make a report in reasonable detail and send it forthwith to the Authority and the Concessionaire.

9. Determination of costs and time

- 9.1 The Independent Engineer shall determine the costs, and/or their reasonableness, that are required to be determined by it under the Agreement. The Independent Engineer shall determine the period, or any extension thereof, that is required to be determined by it under the Agreement.

10. Assistance in Dispute resolution

- 10.1 When called upon by either Party in the event of any Dispute, the Independent Engineer shall mediate and assist the Parties in arriving at an amicable settlement. In the event of any disagreement between the Parties regarding the meaning, scope and nature of Good Industry Practice, as set forth in any provision of the Agreement, the Independent Engineer shall specify such meaning, scope and nature by issuing a reasoned written statement relying on good industry practice and authentic literature.

11. Other duties and functions

- 11.1 The Independent Engineer shall perform all other duties and functions specified in the Agreement.

12. Miscellaneous

- 12.1 The Independent Engineer shall notify its programme of inspection to the Authority and to the Concessionaire, who may, in their discretion, depute their respective representatives to be present during the inspection.
- 12.2 A copy of all communications, comments, instructions, Drawings or Documents sent by the Independent Engineer to the Concessionaire pursuant to this TOR, and a copy of all the test results with comments of the Independent Engineer thereon shall be furnished by the Independent Engineer to the Authority forthwith.
- 12.3 The Independent Engineer shall obtain and the Concessionaire shall furnish in 2 (two) copies thereof, all communications and reports required to be submitted, under this Agreement, by the Concessionaire to the Independent Engineer, whereupon the Independent Engineer shall send 1(one) of the copies to the Authority along with its comments thereon.
- 12.4 The Independent Engineer shall retain at least one copy each of all Drawings and Documents received by it, including 'as-built' Drawings, and keep them in its safe custody.
- 12.5 Upon completion of its assignment hereunder, the Independent Engineer shall duly classify and list all Drawings, Documents, results of tests and other relevant records, and hand them over to the Authority or such other person as the Authority may specify and obtain written receipt thereof. Two copies of the said documents shall also be furnished in editable digital format or in such other medium or manner as may be acceptable to the Authority.
- 12.6 Wherever no period has been specified for delivery of services by the Independent Engineer, the Independent Engineer shall act with the efficiency and urgency necessary for discharging its functions in accordance with Good Industry Practice.