

Expression of Interest (EOI)

“Expression of Interest for Empanelment of Agencies for SITC in the field of Drone Technology and related Tools and Infrastructure”

Reference No. BECIL/GISDRONECONSULTING-SERVICES/2019



BROADCAST ENGINEERING CONSULTANTS INDIA LIMITED

(A Govt. of India Enterprises under Ministry of Information and Broadcasting)

(A Mini Ratna Company)

Corporate Office: C-56/A17, Sector – 62, Noida – 201307

S. No.	Description	Details
1	EOI No.	BECIL/ GISDRONECONSULTING-SERVICES/2019
2	EOI Forms Available at Website	26 th August, 2019 at 10 AM onward
3	Bid Submission Start Date & Time	26 th August, 2019 at 10 AM onward
4	Bids Submission Last Date & Time	9 th September, 2019 at 03 PM
5	Date and Time of opening of bid	9 th September, 2019 at 03:30 PM
6	Place of opening of Technical bid	Broadcast Engineering Consultants India Limited (BECIL) AGM (IT & Mfg), 2st Floor BECIL Bhawan, C – 56, A/17, Sector – 62, Noida – 201307 (Uttar Pradesh) Ph. 0120 – 4177861
7	Website	www.becil.com
8	EOI Fee	Rs. 10,000 (Rupees Ten Thousand only) (Nonrefundable Fee)

Assistant General Manager (IT & Mfg)
Broadcast Engineering Consultants India Limited (BECIL)
C – 56, A/17, Sector – 62, Noida – 201307 (Uttar Pradesh)
Email – vinod.dahiya@becil.com
Phone – 0120-4177850 extn:306



1. **EOI Notice :-**

Broadcast Engineering Consultants India Ltd. Noida invites Expression of Interest from the reputed Companies for Expression of Interest for Empanelment of Agencies for creation of Base Map using Drone Technology, Image processing and Ortho-rectification, Base map preparation, along with other Additional Services for our on-going and up-coming GIS based eGovernance & IT Related Project for an initial period of three years commencing from the date of signing of an agreement.

The EOI shall be accepted under One Bid System. The envelop will contain of **“Technical and Financial Qualifications”** as requested and also contains the **“EOI Fee”** and super scribing on envelope **“EOI for Empanelment of Agencies for SITC in the field of Drone Technology and related Tools and Infrastructure”**.

Bidders shall have to submit EOI Fee of Rs. 10,000 (Rupees Ten Thousand Only) in the form of Demand Draft drawn on any scheduled bank at Noida in favor of "Broadcast Engineering Consultants India Limited" Payable at Noida along with the bid. Bid Document is available on BECIL Website: www.becil.com, for downloading purpose.

This BECIL reserves the right to amend or withdraw any of the terms and conditions contained in the EOI Document or to reject any or all the EOIs without giving any notice or assigning any reason. The decision of the Chairman and Managing Director, Broadcast Engineering Consultants India Limited, Ministry of Information & Broadcasting in this regard shall be final and binding on all.

2. **About BECIL and Requirements :-**

Broadcast Engineering Consultants India Limited (BECIL) an **ISO 9001:2008 certified, Mini Ratna Public Sector Enterprise of Government of India** was established in 24 March 1995 and provides project consultancy services and turnkey solutions encompassing the entire gamut of radio and television broadcast engineering viz content production facilities, terrestrial, like satellite and cable broadcasting in India and abroad. It also provides associated services like building design and construction, human resource related activities like training, providing man power etc. It also undertakes supply of specialized communication, monitoring, security and surveillance systems to defense, police department and various Para-Military forces. The operations of BECIL were headquartered in New Delhi and the company now has its Corporate Office in Noida and Regional Office in Bangalore.

Over the years, BECIL has consciously groomed and developed a team of in-house, versatile and dedicated engineers and also cultivated and harnessing a vast reservoir of professionals drawn from various fields of broadcasting industry which includes public and private broadcasters, defense and cable industry. Through this network of resourceful technical professionals, BECIL has established its pan India presence to serve the needs of the industry.

BECIL has a vast reservoir of experts and integrates the expertise of All India Radio (AIR) and Doordarshan (DD), the National Broadcasting of India, which have built one of the largest Radio

Network catering to nearly one billion people and the world's largest Terrestrial Television Network supplemented by Analogue and Digital satellite Broadcasting services reaching out to millions of TV homes in India and Overseas.

BECIL works as consultancy agency, as a system integrator and as a turnkey solution provider in the fields of Broadcast Engineering and Information Technology. BECIL is now venturing into the execution of Information Technology & eGovernance Projects across India and abroad.

3. Scope of Work and General Instructions to the bidder :-

BECIL has been leveraging technology for real-time governance to enable effective and efficient service delivery to the citizens. With rising demand of Drone Survey from some of our clients, it is now decided to go for the empanelment. In this we have concluded the following scope of this assignment.

Keeping in view the potential of drones, BECIL intends to expand the utilization of drones in various sectors such as police, mining, municipal administration & urban development, agriculture & allied sectors, disaster management, survey, tourism, project/asset monitoring, HT Line Inspection, etc.

Therefore, BECIL being the PSU, for executing the DRONE related service and governance, intends to empanel drone service providers for providing drone based services to government departments such as Police, Mining, Municipal Administration & Urban Development & Town Planning, Smart City Planning, Environment and Forest, Wildlife Sanctuaries, Land Records, Road & Highways, Agriculture & Area for Plantation, Identification of Grey Area / Encroachment / Inaccessible Area, Identification of Lad for SEZs & allied sectors, Rescue & Disaster Management, Survey, Tourism, Identification of New Tourism Spots, Identification of Area for State Level Events, Project / Asset Monitoring, Power etc. The service provider is expected to undertake the drone-based surveys, capture high resolution images / videos, prepare 2D maps & 3D models and other analytics-based outputs which can facilitate effective real-time governance.

BECIL, with an intention to encourage Drone Services, is inviting applications from the organizations are invited to get empanelled with BECIL and provide Drone- based services to different Government Departments.

The scope of work as per the Invitation issued under this EOI Document for the “for Empanelment of Agencies for SITC in the field of Drone Technology and related Tools and Infrastructure”, is the following:

- *GIS mapping*
- *Multispectral Imaging*
- *Ortho-mosaic Generation*
- *DSM, DEM and DTM*
- *Surveillance and Reconnaissance*
- *Progress Monitoring of Projects with Geo Tagged Progress data*

Project Scope (Phase-1)

Stage – I - Drone Data Acquisition: Stereo Image Acquisition using Drone Technology (5cm GSD or better resolution)

a. Establishing Ground Control Network for Drone Survey:

- Identification and marking of Ground Control Points (GCP) on the area of Interest.
- Minimum number of GCP should be marked as per project requirement.
- These should be marked with double frequency DGPS (Digital Global Positioning System)

b. Monumentation of GCP:

- Required number of ground control points shall be marked on the ground using DGPS Method at regular/random intervals throughout the project area
- Control Chart shall be prepared choosing those Ground Control Points with easy access and those which are easily identifiable on image
- The Control points shall be established on the ground, based on the control chart and preferably on Permanent Structures, Culvert Corners, Road Barriers, Bridge Corners, Rock-in-Situ, Field Bunds and other definable points such as road-junctions.

c. Aerial Imagery acquisition using Drone:

- As our project may involves aerial photography data acquisition through the use of Drones, it is mandatory for bidder to obtain necessary clearances from DGCA, Local authority and other applicable agencies, as per prevailing regulations.
- However, necessary support will be provided by Department in this regard

d. Imagery Acquisition Criteria

Components	Description
<i>Pixel size /Resolution</i>	<i>5 cm or better</i>
<i>Flight Height</i>	<i>Not more than 200 ft.</i>
<i>Camera</i>	<i>High resolution camera</i>
<i>Photography condition</i>	<i>Ground must be free of fog, snow, haze, dust</i>
<i>Overlapping</i>	<i>70 % forward and 65 % side</i>

Stage II- Drone Data Processing: Image processing and Ortho-rectification

e. Pre-processing and Ortho rectification of imagery

- Pre-processing of acquired images
- Digital Surface Model & Digital Terrain Model generation
- Ortho-Rectification

f. The Ground Control Points Established and the DEM created should be used for Ortho-rectification of imagery

- Mosaicking and Creating Tiles
- Image strips should be mosaicked for contiguity during the Ortho-rectification process
- Colour balancing should be done for the images to achieve homogeneity across stripe boundaries
- Generation of Image Tiles

Stage – III – Digitization and Change Detection: (On Parallel Collection of Data in stage IV)

g. Base map creation:

- Creation of data layers with necessary attributes, as listed below.
- Note: Field verification of features needs to be done to ensure complete accuracy
- Digitization of bandobasti sazra (all features) through drone imagery)
- Identification of acquired land and undeveloped land.
- Identification of encroachment and other impediments.
- Identification of possible differences pertaining to layout plan using drone-based Ortho-Image.

a. Building Change Detection Using Remote Sensing and GIS: Identification of new building (change detection) once in two years for one time

Change detection report in terms of area, new built up etc. with the time- frame needs to be submitted for at least 2 years for one time. It should involve the following:

- Visual Change Detection through vintage classification
- Overlaying & Change Detection
- Comparison of old and new data
- Digital Change Detection
- Change Analysis Report

Project Scope (Phase – 2) - After completion of Phase – 1

Stage – II – Base map preparation:

Creation of data layers needs to be performed with necessary attributes which are listed below.

Note:

Field verification of features needs to be done to ensure complete accuracy.

The Following features need to be captured:

a. Identification of Water bodies in Municipal limits and Catchment area treatment Plan (which may include afforestation, storm water drainage, silt traps, etc.)

- Identification or demarcation of Water features such as, Canals, Drains, River, Ponds etc.
- Bifurcation of Water bodies in terms of Area and Volume

- Database on Watershed, Ground Water Quality and Water Table
- Flow measurement of all Incoming Flows and Outflows
- Preparation of Catchment Area Plans

b. Identification of Road and Footpath with Encroachment area

- To generate a Road, Footpath, Sidewalk & Parking Layer of Different regions from Drone imagery by digitizing the layer
- To generate path details such as length & width
- To generate the width of the road & footpath
- Preparation of Thematic Road Encroachment map including features such as Car and Two-Wheeler Parking, Encroachment by Individuals, Street Lights, EB Junction, Garbage Collection, Street Vendors, and Kiosks etc.

BECIL would be empanelling three agencies on its panel for contract for “Empanelment of Agencies for SITC in the field of Drone Technology and related Tools and Infrastructure” for all its eGovernance Projects. This empanelment would be initially for Three Years, which can be extended through mutual consent for a further period of two years. BECIL, however, reserves right to terminate this initial contract at any time after giving six months’ notice to the selected service providing Agencies / Organizations.

This empanelment is meant for execution of Pan India eGovernance Projects therefore, agencies from all over the country are invited to participate, subjected to their eligibility and having capacity to provide support on all-India basis.

To ensure continued support to the projects undertaken by BECIL, BECIL may extend the number of empanelled agencies which are found technically qualified companies with proven competence for executing the projects.

The areas where this empanelment can be used for carrying out the drone survey are:-

1. Smart City Planning

- ✓ City Development Planning
- ✓ Mapping
- ✓ Surveillance and Reconnaissance
- ✓ Water Bodies Monitoring & Garbage Disposal Monitoring
- ✓ Infrastructure Project Monitoring
- ✓ Policing and Surveillance
- ✓ State Administrative Boundary / Municipal Boundary / Slum Boundary
- ✓ Telephone exchange / Location of Mobile Towers

2. Transportation (Roadways, Waterways and Railways)

- ✓ Highway and Road Management (Surveillance, Mapping & Search & Rescue)
- ✓ Linear Survey for length of Highways
- ✓ Major and Minor Road Network / Colony Road / Carriage road

- ✓ *Railway Line*
- ✓ *Fly overs / Bridges / Traffic Signals*
- ✓ *To generate a Road Layer, footpath, sidewalks, Parking, Medians, Dividers*
- ✓ *Preparation of thematic road encroachment map based on car and two-wheeler parking*
- ✓ *Traffic Control room / Bus stop / Petrol pump / Public Parking*

3. Agriculture

- ✓ *Crop Survey*
- ✓ *Irrigation Survey*
- ✓ *Spraying of Insecticide, Pesticide and Fertilizers*
- ✓ *Agriculture Tax Assessment*
- ✓ *Identification of Agricultural Losses by Fire / Drought / Flood*

4. Environment & Forest

- ✓ *Forest Area Mapping*
- ✓ *Wildlife Sanctuaries*
- ✓ *Species Counting*
- ✓ *Trees Census*
- ✓ *Wildlife and Poaching Surveillance*
- ✓ *Identification of Areas for Mass Plantation*
- ✓ *protection, preservation, conservation and cultivation of tree*

5. Mines & Geology

- ✓ *Legal / Illegal Mining (Surveillance and Mapping)*
- ✓ *Identification of Mining Affected Areas*
- ✓ *Infrastructure Planning and Monitoring*
- ✓ *Effective Transportation Mechanism of Mining Vehicles*

6. Water Resource Management

- ✓ *Area for Water Treatment Plants*
- ✓ *Irrigation and River Embankment Survey*
- ✓ *Watershed Management*
- ✓ *Utility Surveys (Water & Sewer etc)*
- ✓ *Identification or demarcation Water features like canals, drains, river, pond etc*
- ✓ *Drainage & Line / Pumping Station / Overhead tanks / Water Treatment Plant*
- ✓ *Water supply office locations / Location of Water ATMs*

7. Disaster Management & Health/Medical

- ✓ *Assessment of affected areas*
- ✓ *Disaster Management Planning*
- ✓ *Search & Rescue*
- ✓ *Delivery of Medicines, Vaccines and Blood*
- ✓ *Delivery of Food and Water*
- ✓ *Setting up of Artificial Mobile Networks*
- ✓ *Identification of Grey Area / Inaccessible Area*

8. Land Records

- ✓ Digitization of Land Records
- ✓ Property Tax & Encroachments (Municipal Administration)
- ✓ Identification and Allotment of Land for SEZs / Industrial Area
- ✓ High Rise Structural Inspection
- ✓ Building Change Detection
- ✓ Footpath with Encroachment area
- ✓ Open space / Playground / Rocky areas / Open plot / Park

9. Tourism,

- ✓ Identification of New Tourism Spots
- ✓ Identification of Area for State Level Events
- ✓ Encroachment near Historical Monuments

10. Power

- ✓ Project / Asset Management & Monitoring
- ✓ Solar Panel Inspection for Solar Power Plants
- ✓ Wind Turbine Inspection for Wind Power
- ✓ Continual Inspection of Old Dams for Hydro Power Plants
- ✓ Identification of Ideal locations for Solar / Wind / Hydro Power Plants
- ✓ Electric feeders / High tension line / Electric poles / Location of sub Station / Location of Street light

4. Pre-Qualification Criteria for the Bidders

1. The bidders must be IT Company offering IT / ITES and eGovernance Services or Consulting to different State / Central Government Organizations / PSUs for the three financial years. Submit Incorporation Certificate and MOA as a proof.
2. The bidders should have positive net-worth for last in the preceding three years viz. 2016-17, 2017-18, 2018-19. A certificate, in original, from a Chartered Accountant must be submitted.
3. The bidder must have a full-fledged operational office in any of the Satellite towns in NCR (NCT of Delhi) to interact and execute the work closely.
4. The bidder should produce Articles of Association (in case of registered firms), Bye laws and certificates for registration (in case of registered co-operative societies), Partnership deed (in case of partnership firm)
5. The bidder should be registered with the Goods and Service Tax Department, Tax Deduction and Collection Account Number (TAN) and carry a valid PAN. The bidder should submit the very recent GST Challans.
6. An undertaking (self-certificate) that the bidder hasn't been blacklisted by a central / state

Government institution and there has been no litigation with any government department on account of similar services.

7. The bidders must have at-least One (01 Nos.) Consolidated Government project (enclose copy of Work Orders) for IT / ITES companies of value more than Rs.2,00,00,000/- (Two Crore only) or Three (03 Nos.) Government projects each of value more than Rs.100,00,000/- (One Crore only) or Five (05 Nos.) Government projects each of value more than Rs. 50,00,000/- (Fifty Lakhs only), from last three financial years. Copies of Purchase orders & Agreement Copy / Completion Certificate from the clients must be submitted as supporting documents. Please enclose the required information in the tabular format.

8. The bidder is required to enclose the self-attested and stamped copies of the documents mentioned in the Annexure-II along with the Technical Bid, failing which their bids shall be summarily/out rightly rejected and will not be considered any further.

9. The bidder should submit the Original Power of Attorney/ Copy of Board Resolution in the name of the person signing the bid as per the applicable rules.

10. The Bidders must have furnished the necessary documents to establish their eligibility (indicating the page number in the bid) for each of the items given. Relevant portions in the documents should be highlighted. If a bid is not accompanied by all the necessary documents, it will be summarily rejected.

5. **Bidding Process for the Bidders :-**

1. **Bid Submission**

a. Bidders are advised to study the Bid Document carefully. Submission of the Bid will be deemed to have been done after careful study and examination of all instructions, eligibility conditions, terms and requirement specifications in the EOI document with full understanding of its implications. Bids not complying with all the given clauses in this EOI document are liable to be rejected straight away. Failure to furnish all information required in the EOI Document or submission of a bid not substantially responsive to the EOI document in all respects will be at the bidder's risk and may result in the rejection of the bid at any point of EOI evaluation.

b. Demand Draft (DD) towards EOI Fee amounting to Rs. 10,000 (Ten Thousand) drawn on a scheduled commercial bank and in favour of "**Broadcast Engineering Consultants India Limited.**" Payable at Noida may be placed in an envelope. The envelope should be sealed and superscripted "EOI fee for EOI for Empanelment of Agency for the SITC in the field of Drone Technology and related Tools and Infrastructure". The envelope may be addressed to the Assistant General Manager (IT&Mfg), BECIL and is to be submitted at BECIL Bhawan, C – 56, A/17, Sector – 62, Noida – 201307 (UP) office before the due date and time specified above.

c. The interested agencies are advised to submit their EOI along with the EOI Fee.

2. Last Date of Submission of Bids

- a. *Bids, complete in all respects, must be submitted on or before the due date and time. In the event of the specified date for the submission of Bids being declared a holiday, the Bids can be submitted up to the appointed time on the next working day for which BECIL will make necessary provisions.*
- b. *BECIL may, at its own discretion, extend the date for submission of bids. In such a case all rights and obligations of BECIL and the Bidders shall be applicable to the extended time frame.*
- c. *As the bids can be submitted only up to the defined date and time, there can't be any late bids. BECIL will not be responsible for any delay in obtaining the terms and conditions of the EOI.*
- d. *The Bids / Offers submitted as documents, by telex / telegram / fax / Email or any manner other than specified above will not be considered. No correspondence will be entertained on this matter.*
- e. *At any time prior to the last date for receipt of bids, BECIL, may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the EOI Document by an amendment. The amendment will be notified on BECIL's website <http://www.becil.com> and should be taken into consideration by the prospective bidders while preparing their bids.*
- f. *In order to give prospective bidders reasonable time to take the amendment into account in preparing their bids, BECIL may, at its discretion, extend the last date for the receipt of bids. No bid may be modified subsequent to the last date for receipt of bids. No bid may be withdrawn in the interval between the last date for receipt of bids and the expiry of the bid validity period specified by the bidder in the bid. Withdrawal of a bid during this interval may result in forfeiture of Bidder's EMD.*
- g. *The bidders will bear all costs associated with the preparation and submission of their bids. BECIL will, in no case, be responsible or liable for those costs, regardless of the outcome of the EOI process.*

3. Opening of Bids (Technical Bid)

- a. *BECIL shall convene a bid opening session where one representative from the bidders, who have successfully submitted the bid, can participate.*
- b. *Subsequent to this, BECIL will go through the technical bids of only those bidders whose EOI fee and EMD drafts are found to be in order and haven't withdrawn their bids. Bidders' representatives can remain present during the bids submission and opening process.*
- c. *The bids will then be passed on to a duly constituted Technical Evaluation Committee (TEC) of BECIL for Technical clearance.*

d. *The Cross Verification of all the companies will be done minutely and immediately after the Technical Bid opening and if found anything fraud or wrong, the company will be debarred from the participation in the BECIL for three years. If any document found wrong, the signatory of the bid would be held responsible and appropriate action would be taken by BECIL.*

4. **Bid Validity**

All the bids must be valid for a period of 90 days from the date of EOI opening for placing the initial order. However, the rates should be valid for the initial/extended period of empanelment from the date of empanelment. If necessary, BECIL will seek extension in the bid validity period beyond 90 days. The bidders, not agreeing for such extensions will be allowed to withdraw their bids without forfeiture of their EMD.

5. **Evaluation of Bids**

a. *When deemed necessary, BECIL may seek clarifications on any aspect of their bid from the bidder. However, that would not entitle the bidder to change or cause any change in the substance of the EOI submitted or price quoted. This would also not mean that their bid has been accepted.*

b. *BECIL may waive any minor informality or non-conformity or irregularity in a bid, provided such waiver does not prejudice or affect the relative ranking of any other bidder.*

c. *Any effort by a bidder to influence BECIL's bid evaluation, bid comparison or contract award decisions may result in the rejection of the bidder's bid and forfeiture of the bidder's EMD.*

d. *BECIL reserves the right to accept any bid, and to cancel/abort the EOI process and reject all bids at any time prior to award of Contract, without thereby incurring any liability to the affected bidders or bidders and of any obligation to inform the affected bidders of the grounds for BECIL's action and without assigning any reasons.*

e. *Printed Conditions mentioned in the EOI will not be binding on BECIL. If any specific condition is to be accepted it should be specifically mentioned in the EOI itself*

6. **Technical Evaluation:-**

The One-stage selection procedure will be adopted for evaluation of the bids. In this stage, the technical bids will be evaluated by a duly constituted Technical Evaluation Committee (TEC). The first process for the TEC is to examine the eligibility of the bidders as per the EOI specifications. Bids of the bidders, not satisfying the eligibility criteria will be rejected. Subsequently, the TEC would examine the technical details and may ask for additional information from the bidders. On request from the TEC, the bidding bidders may have to produce additional information. The time limit, in which the bidders' have to submit additional information, will be decided by the TEC and its decision will be final in this regard. Bids of the bidders failing to adhere to the specified time limit will be rejected. Total marks to pass technical evaluation process is 85% and more, detailed descriptions and marks charts are given below.

S.No	Descriptions of Technical Qualification	Maximum Marks
1.	1.1. Participant should exist from more than five years. Submit Incorporation Certificate or MOA as a proof.	15
	1.2. Existence from three years to five years. Submit Incorporation Certificate or MOA as a proof.	10
2.	2.1. ISO 9001-2015 Certified + ISO 27001 – 2013 Certificate	15
	2.2. ISO 9001-2015 Certified	10
3.	3.1. IT / ITES related projects with government department of value more than Rs. 4,00,00,000/- (Four Crore only)	30
	3.2. IT / ITES related projects with government department of value more than Rs. > 2,00,00,00 to <= 4,00,00,000/-	20
	3.3. IT / ITES related projects with government department of value of Rs. 2,00,00,00/- (Two Crore)	10
4.	4.1. The bidder should have positive net-worth for last in the preceding Five years A certificate, in original, from a Chartered Accountant must be submitted.	10
	4.2. The bidder should have positive net-worth for last in the preceding three years. A certificate, in original, from a Chartered Accountant must be submitted.	5
5.	5.1. The Bidders are required to make a technical presentation. The focus of the technical presentation will be the Bidder's understanding of the drone projects, approach and methodology the Bidder intends to use for SITC.	30
	Total Marks	100

7. Award of Contract

a. *On written communication from BECIL for having qualified for empanelment the bidder will sign the contract (letter of empanelment) within 7 days of such communication. Failing which the offer will be treated as withdrawn.*

b. *BECIL will have a panel of three bidders for availing the services during the period of empanelment, which will be initially for three years. Depending on the project requirements, BECIL may extend the number of agencies and the period of empanelment for additional two years through mutual consent. Project would be awarded between the empaneled parties either through limited tenders between empaneled parties or first come first basis with projects or cases where empaneled vendor has worked with BECIL & after that BECIL would get that work.*

8. Penalty for Non – Performance

a. *The defaulting bidder is liable to pay work order cancellation charges of 2 % which will be realized through the pending bills or Security Deposit or by raising claims.*

b. *In case of 5 cancellations of the work orders, the Bidder's empanelment will be kept on hold for 3 months and work got done from alternate sources at the risk and cost of the defaulting Bidder.*

c. *In any of the defaults described above, BECIL reserves the right to get the work done through alternate sources at the cost and risk of the defaulting agency.*

9. Security

a. *The agency will ensure that no information about the software, hardware, database and the policies of the client organization is taken out in any form including electronic form or otherwise, from the client site by the manpower posted by them.*

b. *The agency or its deployed personnel, by virtue of working on BECIL / Client's projects, can't claim any rights on the work performed by them. BECIL / Client will have absolute rights on the work assigned and performed by them. Neither any claims of the agency or its deployed professionals will be entertained on the deliverables.*

10. Indemnity

a. *The empanelled agency will indemnify BECIL and its client organizations of all legal obligations of its professionals deployed for BECIL projects.*

b. *BECIL and its Clients also stand absolved of any liability on account of death or injury sustained by the Agency staff during the performance of this empanelment and also for any damages or compensation due to any dispute between the agency and its staff*

1. General Terms & Conditions of the EOI

- a. *The selected agency will not, without BECIL's prior written consent, disclose the Contract, or any provision thereof, or any specification, plan, sample of information furnished by or on behalf of BECIL in connection therewith, to any person other than a person employed by the agency in the Performance of the Contract. Disclosure to any such employed person will be made in confidence and will extend only so far as may be necessary for purposes of such performance.*
- b. *BECIL may by written notice sent to the selected agency, terminate the work order and/or the Contract, in whole or in part at any time of its convenience. The notice of termination will specify that termination is for BECIL's convenience, the extent to which performance of work under the work order and /or the contract is terminated, and the date upon which such termination becomes effective. BECIL reserves the right to cancel the remaining part and pay to the selected agency an agreed amount for partially completed Services.*
- c. *In the event of the agency's company or the concerned division of the company is taken over / bought over by another company, all the obligations under the agreement with BECIL, should be passed on for compliance by the new company / new division in the negotiation for their transfer.*
- d. *All panel agencies automatically agree with BECIL for honoring all aspects of fair-trade practices in executing the work orders placed by BECIL.*
- e. *The Technical support to the project will be provided throughout the country and the period for which the support is required will be indicated by BECIL from time to time.*
- f. *Upon verification, evaluation/assessment, if in case any information furnished by the Bidder is found to be false / incorrect, their bid will be summarily rejected and no correspondence on the same shall be entertained. Submission of false/forged documents will lead to debarring from participation from BECIL for three years.*

2. Termination for Insolvency & Default

A. Termination for Insolvency

BECIL may at any time terminate the work order / contract by giving written notice of four weeks to the agency, without any compensation to the agency, if the agency becomes bankrupt or otherwise insolvent

B. Termination for Default

- a. *Default is said to have occurred*

- i) *If the agency fails to deliver any or all of the services within the time period(s) specified in the work order or any extension thereof granted by BECIL.*
- ii) *If the agency fails to perform any other obligation(s) under the contract / work order.*
- b. *If the agency, in either of the above circumstances, does not take remedial steps within a period of 90 days after receipt of the default notice from BECIL (or takes longer period in spite of what BECIL may authorize in writing), BECIL may terminate the contract / work order in whole or in part. In addition to above, BECIL may at its discretion also take the following actions*
- c. *BECIL may transfer upon such terms and in such manner, as it deems appropriate work order for similar support service to other agency and the defaulting agency will be liable to compensate BECIL for any extra expenditure involved towards support service to complete the scope of work totally*

3. Force Majeure

- a. *Force majeure clause will mean and be limited to the following in the execution of the contract / purchase orders placed by BECIL:-*
- *War / hostilities.*
 - *Riot or Civil commotion.*
 - *Earthquake, flood, tempest, lightning or other natural physical disaster.*
 - *Restriction imposed by the Government or other statutory bodies, which is beyond the control of the agencies, which prevent or delay the execution of the order by the agency.*
- b. *The agency will advise BECIL in writing, duly certified by the local Chamber of Commerce, the beginning and the end of the above causes of delay, within seven days of the occurrence and cessation of the force majeure conditions. In the event of a delay lasting for more than one month, if arising out of clauses of force majeure, BECIL reserve the right to cancel the order without any obligation to compensate the agency in any manner for what so ever reason.*

4. Arbitration

BECIL and the vendor will make every effort to resolve amicably, by direct negotiation, any disagreement or dispute arising between them under or in connection with the work order. If any dispute will arise between parties on aspects not covered by this agreement, or the construction or operation thereof, or the rights, duties or liabilities under these except as to any matters the decision of which is specially provided for by the general or the special conditions, such dispute will be referred to two arbitrators, one to be appointed by each party and the third to be appointed by the Chief Managing Director, BECIL, Noida and the award of the arbitration , as the case may be, will be final and binding on both the parties. The arbitrators or the umpire as the case may be, with the consent of parties, may modify the time frame for making and publishing the award. Such arbitration will be governed in all respects by the provision of the Indian Arbitration Act, 1996 or later and the rules there under and any statutory modification or re-enactment, thereof. The arbitration proceedings will be held in Noida, Uttar Pradesh, India.

Technical Details (Annexure – I)

**RFP for Empanelment of Agencies for Providing Professional Support Services and IT Consultancy
for our on-going and up-coming Projects**

S. No.	Details Required	Particulars
1	Name of Bidder / Company	
2	Name of Director	
3	Full Address of Reg. Office	
	Telephone No.	
	Fax No.	
	email ID.	
4	Address of office in NCR	
	Telephone No.	
	Fax No.	
5	PAN No	
6	Tax Deduction and Collection Acc. No. (TAN)	
7	Goods & Service Tax Registration No. (GST No.)	
8	Name of the Contact Person	
9	Mobile No. of the Contact Person	
10	Email of the Contact Person	

Signature of authorized person

Date:

Full Name:

Place:

Seal :

Technical Bid Attachments as per Check List (Annexure – II)

S. No.	Particulars (Documents to be attached with the Technical Bid) - Check list	Remarks
1	Copy of Memorandum and Articles of Association	
2	Copy of the Goods & Service Tax Registration Certificate.	
3	Copy of PAN (Permanent Account Number) of the bidder.	
4	Copies of Work Orders of similar work / Agreement copy/ Completion Certificate from Government Department / PSUs	
5	Certificate for Positive Net-worth from CA.	
6	Self-attested copies of Address Proof of the offices in NCR (NCT of Delhi).	
7	Undertaking for not been blacklisted by any of the Govt. organization / PSU	

Bidders to ensure

- A. That all pages have been stamped and signed by the authorized person(s).
- B. That all the pages have been numbered.
- C. That all the documents are legible (Clearly readable).

EOI Acceptance Letter (Annexure – III)

Date:

To,

The Assistant General Manager (F&A),
Broadcast Engineering Consultants India Limited
BECIL Bhawan,
C – 56, A/17, Sector – 62,
Noida – 201307 (Uttar Pradesh)

Sub: Acceptance of Terms & Conditions of EOI.

EOI Reference No. - **BECIL/GISDRONECONSULTING-SERVICES/2019**

Name of EOI / Work: - Expression of Interest for **Empanelment of Agencies for creation of Base Map using Drone Technology, Image processing and Ortho-rectification, Base map preparation, along with other Additional Services for our on-going and up-coming GIS based eGovernance & IT Related Projects.**

Dear Sir,

1. I/ We have downloaded / obtained the EOI document(s) for the above mentioned 'EOI/Work' from the web site(s) namely: ----- as per your advertisement, given in the above mentioned website(s).

2. I / We hereby certify that I / we have read the entire terms and conditions of the EOI documents from Page No. _____ to _____ (including all documents like annexure(s), schedule(s), etc .,), which form part of the contract agreement and I / we shall abide hereby by the terms / conditions / clauses contained therein.

3. The corrigendum(s) issued from time to time by your department/ organization too has also been taken into consideration, while submitting this acceptance letter.

4. I / We hereby unconditionally accept the EOI conditions of above mentioned EOI document(s) / corrigendum(s) in its totality / entirety.

5. In case any provisions of this EOI are found violated , then your department/ organization shall without prejudice to any other right or remedy be at liberty to reject this EOI/bid including the forfeiture of the full said earnest money deposit absolutely.

Yours Faithfully,

(Signature of the Bidder, with Official Seal)

Name of the Representative with Designation

The areas of operation for carrying out the drone survey are:-

1. **City / Town Survey / Land Records / Smart City Planning**
- ✓ City Development Planning
- ✓ Mapping
- ✓ Surveillance and Reconnaissance
- ✓ Water Bodies Monitoring & Garbage Disposal Monitoring
- ✓ Infrastructure Project Monitoring
- ✓ Policing and Surveillance
- ✓ State Administrative Boundary / Municipal Boundary / Slum Boundary
- ✓ Telephone exchange / Location of Mobile Towers
- ✓ Digitization of Land Records
- ✓ Property Tax & Encroachments (Municipal Administration)
- ✓ Identification and Allotment of Lad for SEZs / Industrial Area
- ✓ High Rise Structural Inspection
- ✓ Building Change Detection
- ✓ Footpath with Encroachment area
- ✓ Open space / Playground / Rocky areas / Open plot / Park

156890000. Infrastructure Projects & Transportation (Roadways, Waterways and Railways)

- ✓ Highway and Road Management (Surveillance, Mapping & Search & Rescue)
- ✓ Linear Survey for length of Highways
- ✓ Major and Minor Road Network / Colony Road / Carriage road
- ✓ Railway Line
- ✓ Fly overs / Bridges / Traffic Signals
- ✓ To generate a Road Layer, footpath, sidewalks, Parking, Medians, Dividers
- ✓ Preparation of thematic road encroachment map based on car and two wheeler parking
- ✓ Traffic Control room / Bus stop / Petrol pump / Public Parking

156890001. Agriculture

- ✓ Crop Survey
- ✓ Irrigation Survey
- ✓ Spraying of Insecticide, Pesticide and Fertilizers
- ✓ Agriculture Tax Assessment
- ✓ Identification of Agricultural Losses by Fire / Drought / Flood

156890002. Power Sector

- ✓ Project / Asset Management & Monitoring
- ✓ Solar Panel Inspection for Solar Power Plants
- ✓ Wind Turbine Inspection for Wind Power
- ✓ Continual Inspection of Old Dams for Hydro Power Plants
- ✓ Identification of Ideal locations for Solar / Wind / Hydra Power Plants
- ✓ Electric feeders / High tension line / Electric poles / Location of sub Station / Location of Street light
- ✓ Transmission Line Survey, Monitoring and Maintenance.

156890003. Consolidated Work - Environment & Forest , Water Resources & Watershed Management, Mining

- ✓ Forest Area Mapping
- ✓ Wildlife Sanctuaries
- ✓ Species Counting
- ✓ Trees Census
- ✓ Wildlife and Poaching Surveillance
- ✓ Identification of Areas for Mass Plantation
- ✓ protection, preservation, conservation and cultivation of tree
- ✓ Legal / Illegal Mining (Surveillance and Mapping)
- ✓ Identification of Mining Affected Areas
- ✓ Infrastructure Planning and Monitoring
- ✓ Effective Transportation Mechanism of Mining Vehicles
- ✓ Area for Water Treatment Plants
- ✓ Irrigation and River Embankment Survey
- ✓ Watershed Management
- ✓ Utility Surveys (Water & Sewer etc)
- ✓ Identification or demarcation Water features like canals, drains, river, pond etc

- ✓ Drainage & Line / Pumping Station / Overhead tanks / Water Treatment Plant
- ✓ Water supply office locations / Location of Water ATMs

156890004. Surveillance

- ✓ Search & Rescue
- ✓ Setting up of Artificial Mobile Networks
- ✓ Live Streaming via Internet
- ✓ Tethered Drone/ Long Endurance Live Video Streaming
- ✓ Day and Night Survey- Forest areas

158018656. Disaster Management & Health/Medical

- ✓ Assessment of affected areas
- ✓ Disaster Management Planning
- ✓ Search & Rescue
- ✓ Delivery of Medicines, Vaccines and Blood
- ✓ Delivery of Food and Water
- ✓ Setting up of Artificial Mobile Networks
- ✓ Identification of Grey Area / Inaccessible Area

158018657. Tourism

- ✓ Identification of New Tourism Spots
- ✓ Identification of Area for State Level Events
- ✓ Encroachment near Historical Monuments

Apart from above given sectors, BECIL would go for and accept new upcoming areas and sectors as well.

***** End of the Document *****