No. N04003/49-Cattle_Div Government of India Ministry of Fisheries Animal Husbandry & Dairying (DAHD) Department of Animal Husbandry & Dairying (DAHD)

Dated: 25th October 2022

Dear Sir/Madam.

Department of Animal Husbandry & Dairying (DAHD) invites sealed Expression of Interest (EOI) from leading IT companies/ Livestock and Dairying organizations/ Start-ups/ Research and Educational Institutes for the following digital interface/ concepts in Livestock sector:

(i) Use of Biometrics for animal identification.

(ii) Use of Internet over Things (IoT) devices for Livestock animals.

(iii) Traceability solutions for Dairy and Livestock products using Blockchain or any other Technology.

(iv) Use of Drone Technology in Livestock and Dairying Sector.

The EOI Document containing the details of qualification criteria, submission requirement, brief objective & scope of work and method of evaluation etc. is enclosed.

- 2. The EOI Document containing the details of qualification criteria, submission requirement, brief objective & scope of work and method of evaluation is also available on the DAHD website https://dahd.nic.in/ and can be submitted to Dr Bhushan Tyagi, Joint Commissioner, Room No. 479 Krishi Bhawan New Delhi.
- 3. You may submit your responses latest by 30.11.2022 (15 hrs)
- 4. Queries if any may be referred in writing to the Dr Bhushan Tyagi, Joint Commissioner at the above-mentioned address or Telephone: 911123383699 and e-mail: acsheep@nic.in

(Dr Bhushan Tyagi) Joint Commissioner

Encl.: EOI Document.

Expression of Interest(EOI)

For

Leading IT companies/ Livestock and Dairying Organizations/ Start-ups/ Research & Educational Bodies

To Establish the following concepts in Livestock Sector

- a) Use of Biometrics for Animal identification.
- b) Use of Internet of Things (IOT) devices for Livestock animals.
- c) Traceability solutions for Dairy and Livestock products using Blockchain or any other Technology.
- d) Use of Drone Technology in Livestock and Dairying sector.

Ministry of Fisheries, Animal Husbandry & Dairying Department of Animal Husbandry & Dairying, Krishi Bhawan, New Delhi

October 2022

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TEXT OF ADVERTISEMENT

INVITATION FOR EXPRESSION OF INTEREST

Department of Animal Husbandry & Dairying Government of India invites sealed Expression of Interest (EOI) from leading IT companies/ Livestock and Dairying organizations/ Start-ups/ Research and Educational Institutes to establish the following digital interface/ concepts in Livestock sector:

a) Use of Biometrics for animal identification.

b) Use of Internet over Things (IoT) devices for Livestock animals.

c) Traceability solutions for Dairy and Livestock products using Blockchain or any other Technology.

d) Use of Drone Technology in Livestock and Dairying Sector.

The EOI Document containing the details of qualification criteria, submission requirement, brief objective & scope of work and evaluation criteria etc. can be downloaded from the website CPP portal (https://eprocure.gov.in/eprocure/app)

Further details, if any, may be obtained from Dr Bhushan Tyagi Joint Commissioner, DAHD, Gol Telephone: 911123383699, and e-mail: acsheep@nic.in

Last date for submission of EOI is 30.11.2022 up to 15 hrs. Bid shall be submitted in closed envelope along with non-refundable processing fee of Rs 5000 by way of DD/Pay Order in favor of "PAO, DAHD", payable at Delhi may mentioning "EOI for Establishment of Biometric Identification of animals, IOT, Traceability Solutions and Drone Technology" to Dr Bhushan Tyagi, Joint Commissioner, Room No. 479 Krishi Bhawan New Delhi

Applicants meeting the qualification criteria may be invited for presentation / proposal before the selection committee of constituted by DAHD, Gol.

Joint Commissioner, Department of Animal Husbandry& Dairying, Krishi Bhawan, New Delhi.

Note: DAHD, GoI or any of it's designates reserves the right to cancel this request for EoI and/or invite afresh with or without amendments, without liability or any obligation for such request for EoI and without assigning any reason. Information provided at this stage is indicative and reserves the right to amend/add further details in the EoI.

2. LETTER OF INVITATION

No. N04003/49-Cattle_Div
Government of India
Ministry of Fisheries Animal Husbandry & Dairying (DAHD)
Department of Animal Husbandry & Dairying (DAHD)

Dated: 25th October 2022

Dear Sir/Madam.

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The EOI Document containing the details of qualification criteria, submission requirement, brief objective & scope of work and method of evaluation etc. is enclosed.

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You may submit your responses latest by 30.11.2022 (15 hrs)

Queries if any may be referred in writing to the Dr Bhushan Tyagi, Joint Commissioner at the above-mentioned address or Telephone: 911123383699 and e-mail: acsheep@nic.in

(Dr Bhushan Tyagi) Joint Commissioner

Encl.: EOI Document.

Scope of Work:

Participants can opt for any number of concepts out of the three listed below:

- a. Use of Biometrics: Government of India has launched National Digital Livestock Mission (NDLM) to uniquely identify every livestock. As of now, cattle identification in India is done mostly through ear tags, however a need has been felt for a biometric method for animal identification which will make the Unique ID a fool proof mechanism for all purposes. Therefore, this exercise aims at establishment of using biometric Identification through digital means as a unique, tamper-proof methods for animal identification.
- b. Internet of Things (IOT) devices: Use IOT devices in Livestock sector to help the farmers to measure various relevant vitals of the animals, such as their movement, body temperature, humidity, heat detection, other medical parameters, intake of food etc. This can be achieved by using IoT devices for Real time tracking of activity, Rumination, and other cattle vitals. The data so collected can be helpful in some of the activities listed below using AI/ML algorithms:
 - Real time monitoring of parameters / activities like walking, breathing, temperature, eating, rumination, etc. for early detection of sickness.
 - Identification of abnormal behavior for timely medical help.
 - Monitoring of before and after parameters for treatment/ medication response
 - Heat window alerts for Artificial Insemination.
 - Pregnancy confirmation.
 - Calving alerts
 - Stress alerts
 - Generating real time alerts to doctors and farmers.
- c. Traceability Solutions for Dairy and Livestock Products using Blockchain or any other Technology: It is proposed to work to end to end Traceability solutions for Dairy and Livestock products, following are the expectations:
 - End to end traceability capture.
 - Include GI Tags wherever required.
 - Complete journey of the product be available in form of a QR code on packaging.
 - Any other form of technology or solutions for marketing the product.
- d. Use of Drones: It is proposed to establish use of Drone technology in Livestock and Dairying sector for monitoring and productivity activities. Drone technology is to be made more accessible and controllable for this sector. Some of the uses are listed hereunder but not limited to this list only as it is only for indicative purposes:
 - a. Animal Tracking and counting
 - b. Management of Animal health conditions
 - c. Farm security, etc.

4.0 Aims & Objectives:

- To ensure usage of biometric technology in Animal Identification as a foolproof mechanism.
- To ensure usage of IOT devices in offering a digital platform for the farmers in improving animal health and enhancing milk productivity.
- To ensure early diagnosis of diseases and epidemics in animals and implement solutions to overcome them at the beginning.
- To ensure proper alerts are raised at the right time for heat period, health issues etc.
- To establish end to end Traceability solutions for Livestock products.

To use drone technology for monitoring and productivity activities.

5.0 EOI Processing Fees

A non-refundable processing fee for Rs. 5,000/- (Five Thousand Rupees only) per concept in the form of a Demand draft or a Pay Order drawn in favor of "PAO Department of Animal Husbandry & Dairying" Payable at Delhi must be submitted along with the EOI response. Bids received without or with inadequate EOI processing fees shall be liable to get rejected.

6.0 Venue & Deadline for submission of proposal

Proposal, in its complete form in all respects as specified in the EOI, must be submitted to Dr Bhushan Tyagi, Joint Commissioner, Room No. 479 Krishi Bhawan New Delhi. In exceptional circumstances and at its discretion, DAHD, GoI may extend the deadline for submission of proposals by issuing an amendment to be made available on the DAHD website, in which case all rights and obligations of DAHD, GoI and the bidders previously subject to the original deadline will thereafter be subject to the deadline as extended.

7.0 Validity of Offer:

The offer for EOI as per this document shall be valid for a period of 30 days initially which may be extended further if required by DAHD, GoI.

8.0 TERMS OF REFERENCE

The detailed terms of reference are enclosed at Annexure-I.

9.0 INSTRUCTIONS TO PARTICIPANTS

- 9.1 The Expression of Interest is to be submitted in the manner prescribed below:-All information as detailed below is to be submitted in two hard copies in separately sealed envelopes and one soft copy in CD/Pen Drive:
 - a) Applicant's Expression of Interest as per Format-1.
 - b) Organizational/Individual Contact Details as perFormat-2.
 - c) Experience of the organization/individual as perFormat-3.
 - d) Financial strength of the company/Individual as per Format-4.
 - e) Additional information as per Format-5.
 - f) Declaration as per Format-6.
 - g) Power of Attorney in favour of Authorized Signatory with long and short signatures of Authorized person.
- 9.2 EOI Documents have been hosted on the website downloaded from the website https://dahd.nic.in/. The bidders are expected to examine all instructions, forms, terms and other details in the EOI document carefully. Failure to furnish complete information as mentioned in the EOI document or submission of a proposal not substantially responsive to the EOI documents in every respect will be at the Bidder's risk and may result in rejection of the proposal.

10. Qualification Criteria:

Following will be the minimum pre-qualification criteria. Each eligible participant should possess all the following pre-qualification criteria. Responses not meeting the minimum pre-qualification criteria will be rejected and will not be evaluated.

SN.	Pre-qualification Criteria	Supporting Compliance document Copy of Certificate of Incorporation and Partnership Deed, if any	
1	The applicant shall be a Leading IT Company/ Livestock and Dairying Organization/ Start-ups/ Research and Educational bodies and who have their registered offices in India.		
2	Entrepreneur shall have appropriate experience in usage of his proposed field of participation out of biometric technology, IOT devices, Traceability solutions and Drone technology.	Proof of their activity	

11.0 Evaluation Criteria and Method of Evaluation:

- Screening of EoIs shall be carried out as per eligibility conditions mentioned in this document and based on verification of testimonials submitted.
- b. Eol will be evaluated for short listing inter alia based on their past experience of

- handling similar type of projects, strength of their manpower, financial strength of firm/Individual and presentation / proposal to the selection committee whose decision will be final.
- c. The agencies may be required to make a presentation, if required, to a selection committee show-casing their proposals.
- d. Entity/Individual who qualify as per the eligibility conditions will be provided a brief about the Scope of activities.

12.0 Response:

- 12.1 Bidders must ensure that their Bid response is submitted as per the formats attached with this document. Special comments on the objectives and scope of the service projected in the enquiry may also be submitted along with the offer.
- 12.2 Application in sealed cover super scribed, as "EOI for Establishment of Biometrics, Internet of Things (IOT) devices, Traceability solutions and Use of Drones"

13.0 Conflict of Interest:

- 13.1 Where there is any indication that a conflict of interest exists or may arise, it shall be the responsibility of the Bidder to inform DAHD, Gol detailing the conflict in writing as an attachment to this Bid.
- 13.2 DAHD will be the final arbiter in cases of potential conflicts of interest. Failure to notify DAHD of any potential conflict of interest will invalidate any verbal or written agreement.
- 13.3 A Conflict of Interest is where a person who is involved in the procurement has or may be perceived to have a personal interest in ensuring that a particular Bidder is successful. Actual and potential conflicts of interest must be declared by a person involved in a Bid process.

14.0 Condition under which EOI is issued:

The EOI is not an offer and is issued with no commitment Department of Animal Husbandry and Dairying Government (DAHD,GoI) of India reserves theright to withdraw EOI and or vary any part thereof at any stage. DAHD, GoI further, reserves the right to disqualify any bidder, should it be so necessary at any stage.

15.0 Last date of submission of EOI:

The last date of submission of EOI is 30.11.2022 (15 hrs.).

16.0 FORMATS FOR SUBMISSION:

FORMAT - 1

APPLICANT'S EXPRESSION OF INTEREST

0,	
Sub: Thing	Submission of Expression of Interest to Establish Biometrics, Internet of s (IOT) devices, Traceability Solutions and Use of Drones.
Dear	
	In response to the Invitation for Expressions of Interest (EOI) published
on xx.	xx.xxxx for the above purpose, we would like to express interest to carry out the
above	proposed task.
1.	Organizational/Individual Details (Format-2)
2.	Experience in related fields (Format-3)
3.	Financial strength of the organization/Individual (Format-5)
4.	Additional information (Format-6)
5.	Declaration (Format-7)
	Sincerely Yours,
	Signature of the applicant
	[Full name of applicant]
	Stamp
Da	ate:
Fr	ocl : As above

Note: This is to be furnished on the letter head of the organization.

S N.	. Organizational/Individual Contact Details			
1	Name of Organization/Individual			
2	Main areas of business			
3	Type of Organization Firm/ Company/ partnership firm registered under the Indian Companies Act, 1956/ the partnership Act, 1932			
4	Whether the firm/Individual has been blacklisted by any Central Govt. / State Govt./PSU/ Govt. Bodies /Autonomous? If yes, details thereof.			
5	Contact Person with telephone no. & e-mail ID			

Enclose:-

- 1. Copy of Certificate of Incorporation.
- Copy of Article of Association in respect of 3 above.
- 3. Undertaking in respect of 4 above.

Signature of the applicant

Full name of the applicant Stamp & Date

Experience in Related Fields			
Overview of the past experience of the Organization/Individual in all aspects related to Animal Husbandry/Dairying			
Type of Activity	Size	Annual Turn over	

Decision of Evaluating Committee in ascertaining "similar nature" and "similar assignment" will be final.

Signature of the applicant

Full name of applicant

Stamp & Date

FORMAT-4

		Financial St	rength of the Entity	/Individual	
S. N.	Financial Year	Whether	Annual net	Overall	Annual
		profitable	profit (in	annual	turnover from
		Yes/NO	Crores of Rs.)	turnover (in	the related
	ne Name and			Crores of Rs.)	activities (AH/Dairy ing
)

Note: Please enclose auditor's certificate in support of your claim.

Signature of the applicant

Full name of applicant

Stamp & Date

S.NO	Description	No. of pages

Authorized Person's Signature

TERM OF REFERENCE

1. Essential Criteria of selection of participant:

- The participant can be a leading IT companies/ Livestock and Dairying organizations/ Start-ups/ Research and Educational Institutes.
- Participant shall have appropriate experience in Establishment of Biometrics/ Internet of Things (IOT) devices/ Traceability Solutions/ Use of Drones.
- Implementing Agency and Fund Flow Mechanism:
 Project will be implemented by DAHD along with NDDB as a implementing partner.

3. Project Approval and Monitoring:

- In response to EoI floated by DAHD, participants will formulate bankable proposal as per guidelines and submit proposal to DAHD.
- On receipt of such proposals from participants a Committee will screen all the applications for eligibility and call the eligible participants for making a presentation before the Committee about their concepts/proposal.
- Selected projects will be recommended for Pilot implementation in the field by the Committee.
- Participants shall submit their proposal for field implementation alongwith financials involved and a brief about it should be the part of presentation to be made before the Committee.
- The Pilot exercise should be proposed for at least 1000 nos. of animals with a duration of minimum of 6 months and maximum of 12 months.