



Expression of Interest (EOI)

For

Supply, Installation, Commissioning and training of Colour Sorter for sorting all kinds of small & bold polished Millets (little, foxtail, proso, kodo, barnyard, brown top millet) and decorticated Ragi at a capacity of 0.5 ton/h or more.

CSIR - CFTRI

Disclaimer

All information contained in this document, subsequently provided/clarified are in good interest and faith. This is not an agreement and is not an offer or invitation to enter into an agreement of any kind with any party. Director, CSIR-CFTRI reserves the right to cancel this document without liability or any obligation for such document, and without assigning any reason, thereof, CSIR –CFTRI reserves the right to take final decision regarding award of contract.

Submission of proposal/response to this Expression of Interest doesn't guarantee evaluation or allocation of work. Under no circumstances will the CSIR –CFTRI be held responsible or liable in any way for any claims, damages, losses, expenses, costs or liabilities whatsoever (including, without limitation, any direct or indirect damages for loss of profits, business interruption or loss of information) resulting or arising directly or indirectly by application or non-application to this EoI.

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CSIR-CFTRI

Invitation for Expression of Interest for Supply, Installation, Commissioning and Operation of Color sortex for sorting all kinds of small & Bold polished Millets (little, foxtail, proso, kodo, barnyard, brown top millet) and decorticated Ragi at a capacity of 0.5 ton or more/h at CSIR-CFTRI

CSIR- Central food technological research institute (CFTRI), Mysuru a constituent laboratory under the Council of Scientific and Industrial Research (CSIR), is planning to establish as above.

In this context, CSIR-CFTRI is inviting **Expression of Interest (Eoi)** in the form of a technical proposal (Eoi technical response sheet format attached as Format - 9) from Manufactures/Suppliers/Solution Providers/System Integrators who can provide a turn-key solution, which includes supply, installation, commissioning and demonstration etc.. The system needs to be installed in the Pilot plant of CSIR-CFTRI, Mysuru infrastructure is also in the scope of the current Eoi.

Last date for submission of EOI is **20-09-2022 by 2.00PM** and shall be opened on the **21.09-2022 at 2.30PM**

CRITICAL DATE SHEET

Sl. No.	Stage	Date & Time
1.	Release of Expression of Interest (Eoi)	30-08-2022@5.00pm
2.	Last Date for submission of written queries by Bidders	05-09-2022@ 11.00am
3.	Response to the Queries	07-09-2022@5.30pm
4.	Last date for Submission of Eoi	20-09-2022@2.00pm
5.	Opening of Eoi	21-09-2022@2.30pm
6.	Date of Presentation	Will be intimated later

3. Introduction

CSIR-Central food technological research institute (CFTRI), Mysuru India, is one of the premier laboratories under Council of Scientific and Industrial Research, an autonomous body under Department of Scientific and Industrial Research (Government of India), New Delhi. CSIR-CFTRI is a Science and Knowledge based Research and Development Organization.

1.1 Bidding Data Sheet

SL.No	Particulars	Details
1.	Document ID	CFTRI/74235/2022
2.	Release Date	30-08-2022
3.	Name of the Inviting Authority	Director, CSIR-CFTRI, Mysuru
4.	Eol issued by	Controller of Stores & Purchase CSIR-CFTRI, Mysuru
5.	Availability of Eol	Eol can be Downloaded from : 1. CSIR-CFTRI website www.cftri.res.in 2. Central Public Procurement Portal (CPPP) www.etenders.gov.in
6.	Last date of Submission of Eol	20-09-2022 @ 2.00pm

4. Evaluation of Eol

a. General Instruction

1. The EOI shall be submitted within the stipulated date and time on CPP Portal www.etenders.gov.in
2. Eol proposal shall consist of supporting proofs and documents as defined in Section-6, Pre-Qualification Criteria.
3. Bidder shall submit all the required documents as mentioned in Section 12 of this document.
4. The Eol proposal submitted by Bidder should be complete document. The document should be page numbered, must contain the list of contents with page numbers and shall be digitally signed by the Authorized Representative of the Bidder.
5. Eol document submitted by the Bidder should be concise and only relevant information as required shall be furnished.
6. The entire proposal shall be strictly as per the format specified in this Invitation for Expression of Interest and any deviation may result in the rejection of the Eol proposal.
7. Any proposal received by CSIR-CFTRI after the submission deadline shall not be considered. No further correspondence on the subject will be entertained.

b. Evaluation Process

1. CSIR-CFTRI shall evaluate the response to the Eol and all supporting documents/Documentary evidences. Non-submission of requisite supporting documents/documentary evidence, may lead to rejection of the Eol Proposal.
2. CSIR-CFTRI may seek additional documents or clarifications as and when required from the Bidders.
3. All bidders may be required to give their presentation on the date and time fixed by the CSIR-CFTRI either in person or virtually (online).

5. Brief Objective and Scope of Work

The broad specifications of Colour Sorter is as follows:

The proposed solution should be well engineered and should satisfy the following minimum criteria:

1	Approximate requirement in terms of size and capacity (The actual requirement will be decided at the RFQ stage)	Capacity of Sortex machine – 0.5 ton or more/h Suitable to handle all polished millets and decorticated Ragi
2	Scope of the engagement	The bidder is expected to provide a turnkey solution with the following scope <ul style="list-style-type: none">• Supply the Standalone unit with complete necessary setup and accessories like compressor and stabilizer. The sorter cabin should have the necessary fittings like temperature control facility, bucket elevators, storing tanks with necessary engineered structures and dust-control system for installation and proper operation. AI system, and all other necessary accessories for smooth operation of the colour sorter.• Installation• commisioning• Demonstration

Annexure-A (5.1)

Requirement of colour sorter (4 to 6 chute) for sorting of all kinds small millets before and after polishing, (little, proso foxtail, barnyard brown top millet) and **decorticated ragi to minimize the loss of good grains in the rejection.**

The sorter will be used as standalone unit and should have the necessary setup and accessories like compressor and stabilizer. The sorter cabin should have the necessary fittings like temperature control facility, bucket elevators, storing tanks with necessary engineered structures and dust-control system for installation and proper operation. AI system, and all other necessary accessories for smooth operation of the colour sorter.

The colour sorter should have:

1. Programmable configuration to separate raw husked and unhusked millets, polished millets and also processed millets like decorticated ragi, parboiled polished millet at a capacity of 0.5 tons or more per hour.
2. High sensitivity, high resolution, high speed camera with image processor.
3. Upto 99.9% foreign material and defect removal with virtually zero good grains in final reject.
4. Party shall come up with technical specification.

6. Bidder eligibility for participating in Eol

- a. Bidder (OEM/SI) should have carried out at least 3 installations (in last five years). Out of which at least one should be more than **0.5 ton or more/h.** capacity for similar kind of equipment/Machinery.
- b. Bidder should submit supply order and installation report as proof. A list of user is also desirable

7. Nature and Requirements for Services

The sorter will be used as standalone unit and should have the necessary setup and accessories like compressor and stabilizer. The sorter cabin should have the necessary fittings like Temperature Control Facility, bucket elevators, storing tanks with necessary engineered structures and dust-control system for installation & proper operation. AI system, and all other necessary accessories for smooth operation of the colour sorter and need to be supplied, installed, commissioned, demonstrated and has to be interlinked as per the operation requirement.

8. Local Content & Associated Guidelines

- a. The OEM of each major component such as should mention the local content in their solutions. (With reference to Make in India Order No. no. P-45021/2/2017-PP (BE-II) dated 16th September 2020 of Ministry of Commerce and Industry, Government of India and any amendments thereon)
- b. The vendor also should comply to Order No.P-45021/112/2020-PP(BE-II)(E-43780) dated 24.08.2020 of Ministry of Commerce and Industry, Department for Promotion of Industry and Internal Trade and any amendments thereon.

Important Note:

- Complying to the above guidelines is not essential for participating in the Eol. However, the bidder should provide correct information, so that CSIR-CFTRI takes an informative decision for the RFQ stage.
- All claims regarding the local content should be supported by detailed breakup, valid justifications and OEM certificates.

9. Shortlisting bidders for the for the RFQ stage (next level)

- a. It is desirable for a bidder to participate in Eol to be eligible for the RFQ stage.
- b. However, CSIR-CFTRI reserves the right to shortlist (considering both technical merit including capability to run the benchmark applications as well as procedural/financial compliance) a sub-set of the participating bidders for the RFQ stage.

Also, CSIR-CFTRI reserves the right to go for a global/open tender if felt appropriate/necessary as an outcome of the Eol process.

10. Eol-RFQ restrictions

- a. The OEM can participate through only one System Integrator and vice-versa.
- b. The OEM-SI pair participated in Eol should be same at the RFQ stage as well.

The proposed solution/system in the Eol should be the same or next generation while participating in the RFQ. The bidder cannot quote a completely different solution than the one proposed in the Eol.

11. Terms and conditions

- a. EOI are invited from **Manufacturers or their authorized dealers.**

Preference may be given to local suppliers as per Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry Order No.P45021/2/2017-PP (BE-II) dated 16 September 2020 as amended from time to time.

Class – I Local supplier	Whose goods/service offered for procurement has local content equal to or more than 50% as defined below:
Class – II Local supplier	Whose goods/service offered for procurement has local content more than 20% but less than 50% as defined below
Non-Local Supplier	Whose goods/service offered for procurement has local content less than 20% as defined below

Local content: Means the amount of value added in India, which shall, unless otherwise prescribed by Nodal Ministry, be the total value of item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all custom duties) as a proportion of the total value, in percent.

The above bidders/Firms are required to indicate percentage of local content and provide self-certification the items offered meet the local content requirement for Class – I Local Supplier/Class – II Local Supplier as the case may be. Further the bidder shall also give details of the location(s) at which the local value additions is made.

False declaration will be in breach of the Code of Integrity under Rule 175(1)(i) (h) of the General Financial Rules 2017 for which a bidder or its successors can be debarred for up to two years as per Rule 151(iii) of the General Financial Rules along with such other actions as may be permissible under law.

A supplier who has been debarred by any procuring entity for violation of above cited order shall not be eligible for preference under above order for procurement by any other procuring entity for the duration of the debarment.

- b. Requirement of Registration (Order No.F.No.6/18/2019-PPD dated 23.07.2020 of Department of Expenditure, Ministry of Finance, Government of India refers)

- i. Any bidder from a country which shares a land border with India will be eligible to

bid in this tender only if the bidder is registered with the Competent Authority i.e., Registration Committee as constituted by Department of Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India

- ii. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial judicial person not falling in any of the descriptions of bidder stated hereinbefore, including any agency branch or Officer controlled by such person, participating in a procurement process.
- iii. "Bidder from a country which shares a land border with India" for the purpose of this order means:

i)	An entity incorporated, established or registered in such a country; or
ii)	A subsidiary of an entity incorporated, established or registered in such a country; or
iii)	An entity substantially controlled through entities incorporated, established or registered in such a country; or
iv)	An entity whose beneficial owner is situated in such a country; or
v)	An Indian (or other) agent of such an entity; or
vi)	A natural person who is a citizen of such a country; or
vii)	A consortium or joint venture where any member of the consortium or joint venture fails under any of the above

c. The beneficial owner for the purpose of above will be as under

- i. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more judicial person, has a controlling ownership interest or who exercise control through other means.

Explanation -

a)	"Controlling ownership interest" means ownership of a or entitlement to more than twenty-five percent of shares or capital or profits of the company;
b)	"Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements.

- ii. In case of a partnership firm, the beneficial owner is the natural persons(s) who, whether acting alone or together, or through one or more judicial person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;
- iii. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more judicial person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;
- iv. Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;

- v. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.
- vi. An agent is a person employed to do any act for another, or to represent another in dealings with third person.

Further the following certificate has to be submitted by the bidder/Firms

“I have read the clauses regarding restrictions on procurement from a bidder of a country which shares a land border with India; I certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority. I hereby certify that this bidder fulfills all requirements in this regard and is eligible to be considered.

(Name & Signature of Applicant)

Date :

(Where applicable, evidence of valid registrations by the competent Authority shall be attached)

Further bidders must comply with order No.6/9/2020 – PPD dated 24.08.2020 from PPD division, Department of expenditure, Ministry of Finance

- d. If any information furnished by the applicant is found incorrect at a later stage, it shall be liable to be debarred from tendering/taking up of work in CSIR. CSIR-CFTRI reserves the right to reject any prospective application without assigning any reason.

12. SUBMISSION REQUIRMENTS

The interested parties are requested to submit their Eol bids on-line through NIC eProcurement System/Portal on before the due date of submission along with the following forms:

SL.NO.	FORM	FORMAT
1.	Applicant's Consent Form	1
2.	Firm Contact Details	2
3.	Experience in related fields	3
4.	Additional Information	5
5.	Declaration	6
6.	Local Content & Associated Forms	8
7	Eol Technical Response Sheet	9

FORMAT – 1

Applicant's consent Form

To,

The Director
CSIR CFTRI
MYSURU

Subject : Submission of Expression of Interest for Supply, Installation, Commissioning and Operation of *Color sortex for sorting all kinds of small & Bold polished Millets (little, foxtail, proso, kodo, barnyard, brown top millet) and decorticated Ragi at a capacity of 0.5 ton or more/h*

Dear Sir,

In response to the Invitation for Expression of Interest (EOI) published on _____ for Supply, Installation, Commissioning and Operation of *Color sortex of 0.5 ton or more/h capacity* ,as instructed, we attach following documents:

- a. Firm Contact Details (Format – 2)
- b. Experience in related fields (Format -3)
- c. Financial Strength of the Organization (Format – 4)
- d. Additional Information (Format – 5)
- e. Declaration (Format – 6)
- f. Non-Disclosure and Confidentiality Agreement (Format – 7)
- g. Local Content & Associated Format (Format – 8)
- h. Eoi Technical Response Sheet (Format-9)

Signature of the Applicant

Stamp & Date

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

FORMAT - 2

FIRM CONTACT DETAILS		
1	Name of the Organization: Website	
2	Name of the Contact Person: a) Name: b) Address c) Telephone: d) Fax: e) E-Mail:	
3	Year of Incorporation	
4	Type of Organization a) Public Sector/ Limited/Private Limited/ Partnership/ Proprietary/ Society/ Any other b) Whether 'Foreign Equity Participation (Please give name of foreign equity participant and percentage thereof) c) Names of Directors of the Board/ Proprietors d) Name and address of NRI(s), if any	
5	Category of the firm: Large/Medium/Small scale unit	
6	Address of the Registered Office:	
7	Number of Offices with addresses (Excluding Registered Office): a) India b) Abroad	
8	Certificate of registration as a manufacturing unit	
9	Permanent Account Number	
10	GST Number	
11	Status of ISO Certification	
12	List of products/technologies worked with as regular activity in last three years. Give the list of products/technologies with general specifications and the customers.	
13	Whether the Organization has been blacklisted by any Central /State Government Department Organization	Yes/No

Signature with Name & Seal:

Place:
Date:

FORMAT - 3

Experience in Related Fields		
Overview of the past experience of the Firm		
Sl.No	Item	Particulars
1.	Experience & Details of work done with any Govt/Public Sector Undertaking (Publically funded)/Autonomous/Universities /R & D Organization	
2.	Experience & Details of manufacture/supply/work done with other than Sl.No.1	
3.	Experience & Details of Work done in India	

Signature of the applicant _____

Full Name of the applicant _____

Stamp & Date _____

FORMAT - 5

Additional Information		
i. List of attachments related to the previous sections		
Sl.No	Item	Particulars
1.		
Additional information to support the eligibility (Not more than 2 pages)		

Signature of the applicant _____

Full Name of the applicant _____

Stamp & Date _____

FORMAT – 6

Declaration

We hereby confirm that we are interested to participate with CSIR-CFTRI in Supply, Installation, Commissioning and Maintenance of **Colour Sorter** and all the information provided herewith is genuine and accurate to the best of our knowledge.

We also confirm that our firm has not been blacklisted or has any litigation or any conflict of interest that may impact on the delivery of services.

Authorized Person's Signature :

Name and Designation :

Date of Signature :

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

Format – 8

Format – 8-A

Format for declaration by the Bidder on Non-applicability of Exclusion from Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017 (on Letter Head of the bidder)

(Ref: - Govt. of India, Ministry of Finance, Dept. of Expenditure Order No. F.No.6/18/2019-PPD dated 23.07.2020 {Public Procurement No.1} and subsequent orders on the subject)

Ref. No: _____ Date _____

To,

The Director,

CSIR-CFTRI,

Cheluvamba Mansion

Opp. Railway Museum, KRS Road,

Mysuru-570020

Sir/Madam,

With reference to your Tender No. _____ dated

_____ I/We hereby undertake that “I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I hereby certify that this bidder is not from such country or, if from such a country, has been registered with the Competent Authority. I hereby certify that this bidder fulfills all requirements in this regard and is eligible to be considered.

Thanking you,

Yours sincerely,

Signature (Name of the Authorized Signatory)

Company Seal

“[Where applicable, evidence of valid registration by the Competent Authority shall be attached]”

Format - 8-B

Self-Certification Form for Minimum 50% or for Minimum 20% Local Content
(on Letter Head)

1. Ref: DPIIT Order No.P-45021/2/2017-PP (BE-II) pref. to Make in India dt. 28th May, 2018 as amended vide OM dated 16th Sept 2020 or by the competent Ministries/Departments in pursuance of this order.
2. Ref: Rule 153 (iii) of General Financial Rule - GFR (GoI)

This is to certify that percentage of local content against CSIR-CFTRI EOI no..... dt.....and our Ref. No..... dt.isPercent(In Words.....) class/local supplier.

Local content value added- (PERCENTAGE)	
State:	
District:	
Place:	

Thanking you,
Yours sincerely,

Signature (Name of the Authorized Signatory)
Company Seal

Format - 9

Supply, Installation, Commissioning and Maintenance of Color sortex of 0.5 ton or more/h capacity for sorting of all kinds millets before and after dehusking, polishing, (little, proso foxtail, barnyard brown top millet) and **decorticated ragi to minimize the loss of good grains in the rejection
at CSIR CENTRAL FOOD TECHNOLOGICAL RESEARCH INSTITUTE**

Eol Technical Response Sheet

The bidder is requested to fill this response sheet in the 3rd column and may provide relevant references and remarks in the 4th column. No field in the 3rd column should be left blank. Please write "Not Applicable", if any information is not relevant to the proposed solution.

1 st	2 nd	3 rd	4 th
Sl. No.	Information Sought by CSIR-CFTRI	Proposed by the Vendor	Remarks/Reference
1	OEM, Make & Model		
	Color based Image processing with DSP		
	Flexible Colour Cameras		
	InGaAs Technology		
	FPGA with 50 million gates fabricated using 28 Nano meter advanced technology		
	Camera Pixel with 12288 pixels and above & 60,000 scans per second, Image processor & profile technology		
	Min Visible Resolution 0.15mm ²		
	CHUTE groove type		
	LED light		
	IR light		
	Remote access		
	High speed Ejectors with response time of 1 milli second with more than 5 Billion cycles		
2	Demonstrable Performance		
(i)	I/O performance wrt small millets		
(ii)	I/O performance wrt bold millets		
(iii)	I/O performance wrt decorticated ragi		
3	Software based Nodes (Please provide the details in separate sheet)		
	Individual sensitivity adjustments for specific defects, like Spot, Low Color, High Color		
	Optimization of number of cycles should be achieved with intelligent "Ejector Control Software"		
	Image processing with DSP		
	Image Capture technology using AI		
	Intelligent defect detection and Ejection control system		
4	Camera based Nodes (Please provide the details in separate sheet)		
	Make		
	Sensitivity, Resolution, Speed of camera wrt pixels.		
	Camera scans per second		
	Image processor pockets of pixel data in one second		
5	Pneumatic Specifications (Please provide the details in separate sheet)		
	Make - ELGI or equivalent Ingersoll rand, Coleparmer etc		

	Operating Air pressure – 2bar and above		
	Air pressure required – 6 bar and above		
	Air dryer		
	Air filter		
	Air pipeline and tank		
6	Electrical Specifications <i>(Please provide the details in Separate Sheet)</i>		
	Power rating		
	Operating Voltage		
	Earthing Voltage		
	Earthing Voltage		
7	Installation Specifications <i>(Please provide the details in separate sheet)</i>		
	Standalone unit equipped with all necessary setup and accessories like compressor and stabilizer etc		
	The sorter cabin should have the necessary fittings like temperature control facility, bucket elevators, storing tanks with necessary engineered structure and dust-control system for installation & proper operation.		
	Machine Storage Hopper capacity – 1.5ton/h		
	Vertical Bucket elevators as per capacity		
	Spouting / pipelines		
	Installation structure drawings		
8	Demonstration of the unit at their site prior to dispatch		
9	Training of CFTRI staff for one-week minimum at CFTRI for operation and maintenance.		