

**INVITATION FOR SUBMISSION OF EXPRESSION OF INTEREST (EOI)
FOR SOLUTION FOR RFID (RADIO FREQUENCY IDENTIFICATION)
BASED PRODUCT TRACKING SYSTEM FOR INK MANUFACTURING
UNIT, BRBNMPL, MYSURU**

**Not Transferable
Security Classification: Non-Security**

No: EOI/001/MYS/IMU-25/2020-21

Dated: 19/02/2021

This EOI document contains 14 Pages

Document is given to:

M/s _____

Address _____

Details of contact person in BRBNMPL regarding this tender:

(Shri T R Gururaj)
Deputy General Manager(PP)

For and on behalf of

GENERAL MANAGER (PP),
INK MANUFACTURING UNIT
BHARATIYA RESERVE BANK NOTE MUDRAN (P) LTD.
(Wholly Owned Subsidiary of Reserve Bank of India)
Note Mudran Nagar, Mysuru – 570003
Telephone No. 0821-2469079, 2469081 Fax: 0821-2582955/2582099
EMAIL: trgururaj@brbnmpl.co.in
Website: www.brbnmpl.co.in

I. Notice Inviting Tender (NIT)
BHARATIYA RESERVE BANK NOTE MUDRAN (P) LTD.
(Wholly Owned subsidiary of Reserve Bank of India)

Ink Manufacturing Unit,
Note Mudran Nagar, Mysuru – 570003
Tel No: +91 - 821 –2469079; Fax No: +91 - 821- 2582955, 0821-2582099

No: EOI/001/MYS/IMU-25/2020-21

Dated: 19/02/2021

1. Sealed Expression of Interest is invited for **identifying a suitable solution for RFID (Radio Frequency Identification) based product tracking system** from “Manufacturer / Brand Owner / Authorized representatives / Distributors / Dealers / Authorized Agencies. This is only an Expression of Interest for understanding various solutions for **RFID based product tracking system** available in the market.
2. **Based on the solutions, product details, specifications etc. received through this EOI, a separate two-part open tender will be floated.**
3. Manufacturer / Brand Owner can participate directly or can authorize only one representative / Distributor / Dealer / Authorized agency for participating in this EOI.
4. Details of indicative requirement of item is as below:

Sl. No	Brief Description of Item	Quantity Required(No)
1	SOLUTION FOR RFID BASED PRODUCT TRACKING SYSTEM FOR INK MANUFACTURING UNIT	01

3.

Type of Tender (Two Bid / PQB / EOI / RC / Development / Indigenization / Disposal of Scrap / Security item etc.	Expression of Interest
Date of Publication of EOI documents	19/02/2021
Price of the EOI Document	Free
Closing date and time for receipt of EOI	14:30 Hrs. on 24/03/2021
Place of receipt of EOI	Administrative Building, BRBNMPL, Note Mudran Nagar, Mysuru-570003
Time and date of opening of EOI	15:00 Hrs. on 24/03/2021.
Place of opening of EOI	Administrative Building, BRBNMPL, Note Mudran Nagar, Mysuru-570003
Nominated Person / Designation to receive bulky documents (Clause 21.1 of GIT)	Shri. T R Gururaj, Deputy General Manager(PP), BRBNMPL, Mysuru

4. The interested parties may obtain further information about this requirement from the above office. EOI documents may be downloaded from the BRBNMPL website: www.brbnmpl.co.in or be obtained from

the office of Ink manufacturing unit, BRBNMPL, Mysuru.

5. If requested, the EOI documents will be mailed by registered post/Speed Post to the domestic participants for which charges per set of EOI document shall be Rs.500 within India. The participant is required to submit a separate Demand Draft drawn on BRBNMPL, payable at Mysuru, for postage charges along with his request for EOI documents. Any delay in receipt of EOI documents will not entitle any parties for extension of submission dates and BRBNMPL will not be responsible for any such delays.
6. Interested parties shall ensure that their EOI documents, duly sealed and signed, complete in all respects as per instructions contained, are dropped in the tender box located at the address specified on or before the closing date and time indicated in the Para 3 above, failing which the EOI will be treated as late and will be liable for rejection.
7. In the event of any of the above-mentioned dates being declared as a holiday/ closed day for the purchase organization, the EOI document will be received / opened on the next working day at the appointed time.
8. BRBNMPL is not responsible for any postal delay and the EOI proposals shall not be accepted for opening after due date and time. Further, interested parties must satisfy themselves about all the details required to be filled in the EOI before submission of details. All the pages of EOI documents as at Annexures, basic information and other supporting documents shall be duly stamped, signed and submitted.
9. BRBNMPL reserves the right to Cancel / Reject/ Re-tender the EOI without assigning any reason thereof. BRBNMPL also reserves the right to accept the EOI in whole or in part. Incomplete EOI documents submitted not in accordance with the directions issued shall be liable for rejection.
10. The firm should not have been blacklisted /debarred for dealing by Government of India or any State Government in any manner and an undertaking should be submitted along with the EOI, to this effect.
11. Participants are required to stamp and provide their authorized signature on every page of the EOI document and all the supporting documents submitted.
12. The EOI documents are not transferable.
13. Any further amendment/s, if any, shall be notified on the website of the company only. Interested applicants are requested to visit our website periodically to know any changes / amendments.

Yours faithfully,
For & on behalf of BRBNMPL,
Deputy General Manager(PP),
Ink Manufacturing Unit,
BRBNMPL,
Note Mudran Nagar,
Mysuru - 570 003
Telephone: 0821-2469079, 2469081 Fax: 0821-2582955/2582099
Email: trgururaj@brbnmpl.co.in

II. SCOPE OF WORK AND REQUIREMENTS

I. Introduction

Bharatiya Reserve Bank Note Mudran Private Limited (BRBNMPL) is a wholly owned subsidiary of Reserve Bank of India having two printing presses one at Mysuru, Karnataka & the other at Salboni, West Bengal, for banknote production. BRBNMPL at its Mysuru facility have its own Ink Manufacturing Unit for manufacturing ink required for the printing Banknotes. This invitation to EOI is published to **identifying a suitable solution for RFID (Radio Frequency Identification) based product tracking system.**

Relevant information such as Scope of Work, Functional Requirements, Terms of Reference, General Terms & Conditions, Procurement Process & Qualifying Criteria, are given below:

Scope of Work:

Ink Manufacturing unit is engaged in producing about 60 shades of 4 varieties of ink and also manufactures different types of intermediates used for producing bank note inks.

BRBNMPL is intending to have a better tracking of the product right from weighing of raw material to the dispatch of finished goods. The products are to be monitored in each of manufacturing stage including WIP (Work in Progress) and FG (Finished Goods).

The proposed RFID based product tracking system is expected to help in:

- Tracking the raw materials used in a particular product.
- Storing the machine parameters.
- Management of ink mixing vessels and tracking its history, the time taken at each work station etc.
- By reading the container label, obtaining full details of the product, including QC parameters.
- Tagging of manpower at all stages.
- Monitoring and accounting the finished goods produced.
- Monitoring and accounting the finished goods dispatched to various centres.
- Monitoring and accounting the finished goods available in stores.

This Expression of Interest is published for **identifying a suitable solution for RFID based product tracking system.**

This Expression of Interest has been invited from the “Manufacturer/Brand Owner/Authorized representatives/Distributors/Dealers/ Authorized Agencies of item” who possess the necessary experience in supply of **RFID BASED PRODUCT TRACKING SYSTEM**. Manufacturer/Brand Owner can participate directly or can authorize only one representative/Distributor/Dealer/Authorized agency for participating in this EOI.

Functional Requirements:

The Bidder shall provide necessary solution, technical specifications, bill of quantity(BOQ) along with budgetary quote to meet the following functional requirements.

Brief Explanation of terms Used:

- 1) Vessel – Three types of Vessels having Capacity of 700 Litre, 270 Litre and 50 Litre. Material of Construction: Cast Iron, Wheel Mounted type.
- 2) Ink Tin – Two types of Ink Tins having capacity of 20 KG and 2.5 KG. Material of Construction: Mild Steel(MS).
- 3) Batch – A Batch contains Large (500 KG), Medium (200 KG) and Small (20 KG) quantity of ink to be manufactured.
- 4) Process Flow – Process flow means steps in manufacturing a batch of ink from start to end.it will be as below:
Work Order → Weighment → Pre Mix → TRM → Vacuum Mix → Quality
control → Potting Label Management → Packing Dispatch.
- 5) Labelling – Paper Labels (Sticker Type) pasted on ink tins.
- 6) Work Order – A Work Order means instructions to be followed while manufacturing a Batch of Ink. It contains product code, description, batch no, planned weight, date, formulation, instructions to be flowed etc.
- 7) Weighment – Packed raw materials (paper packing, drums etc.) brought from stores to be tagged. Weighment details of the raw material loaded into vessel should be as per work order and same to be tagged.

General Scope:

- Shop floor control – Vessel Movement, Process delay, production priorities and scheduling, decision making.
- Stage wise product accounting, tracing and security.
- The proposed system shall address the movement of the batches, account input raw material and finished output, monitor stage wise processing time, label management – right product with right label, packing and dispatch activities.

- The proposed system to provide task completion activities for each work station which in turn to be captured in the consolidated days activity reporting.
- Error free dispatches.
- The above activity is envisaged to be carried out in RFID platform with local connectivity solutions and not under Cloud solutions.
- The output derived from RFID based product tracking and tracing should be able to integrate with the existing standalone (Excel) or MIS/ERP related software's to derive Raw material planning, Production Planning, Financial reporting etc.
- Inputs from existing standalone (excel) or MIS software/planned auto material dosing unit/ERP software to avoid data entry repetition.

What is expected out of the system:

At any given point of time, the following data should be readily available in the system:

- ✓ Status of any particular batch (i.e. where that batch is lying in the process chain)
- ✓ Number of batches lying in each work station.
- ✓ Quantity of finished products lying in the warehouse.
- ✓ By reading the labels on the container, full details of the product
- ✓ Quality control parameters of particular batch
- ✓ Tagging of manpower at each stage
- ✓ Time taken for a batch at each work station etc.

Activities to be captured -

1. Work Order

- Generation and Issue of Work Order
- Tagging of Work Order with the batches
- Daily deployment of manpower needs to be captured from Excel.
- QC check and stamping on Work Order
- Consolidated report for day's generation of Work Orders for all batches

2. Weighment

- Capturing weighing start and end time
- Tagging of weighing scale with batch and also option for integrating output of auto dosing plant.
- Vessel availability status.

- Tagging of Work Order to Vessels.
 - Tagging of manpower at each stages.
 - Tagging of incoming raw materials from Stores to Shop floor
 - Bin card management
 - Record of weighment/output from auto dosing plant to be captured and to be compared with Work Order quantities
 - Weighment to have override/correction mode to accommodate only quantities. (Planned Vs Actual quantity).
 - Consolidated report generation for day's weighment carried out for all batches
3. **Pre-mix**
- Stamping of pre-mix Start time and completion time
 - Pre-mixer to be tagged to the batch and vessel
 - Provision of manual entry for – M/c No, RPM, Current, Set time etc. Parameters to be manually checked with Work Order. (Plan Vs Actual)
 - Consolidated report generation for day's pre-mixing carried out
4. **TRM (Triple Roll Mill)**
- Stamping of Start time and completion time of each pass
 - TRM M/c to be tagged to the batch and vessel
 - Provision for changeover of the vessels
 - Completion stamping to be done with changeover vessel
 - Consolidated report generation for day's TRM activities carried out
5. **Vacuum Mix**
- Stamping of Start time and completion time.
 - Vacuum Mix M/c to be tagged to the batch and vessel.
 - Record of weighment of additional quantities of Raw Materials to be captured.
 - Provision of manual entry – M/c No, RPM, Vacuum, Current, Set time etc.
 - Consolidated report generation for day's Vacuum Mix activities carried out.
6. **Quality Control**
- Tagging of Work Order and batch with respect to the corrections carried out and entry of QC parameters – Standard Vs Actual values

- Stamping of Start time and completion time
- Quality Control – OK stamping for potting.
- Consolidated report generation for day's Quality Control activities carried out.

7. **Potting**

- Stamping of start time and completion time.
- Tagging of potting machine and weighing scale with batch.
- Label management with respect to yield.
- Manual entry provision to capture odd size packs.
- Consolidated report generation for day's Potting activities carried out.

8. **Label management**

- Stamping of start and completion time
- Tagging of label printer with batch and yield.
- RFID based labels.
- Provision to enter unutilised labels.
- Consolidated report generation for day's label generation activities.

9. **Packing**

- Stamping of start and completion time.
- Recording of variety and quantity
- Standardised palletisation.
- Recording weightment – Net weight, Gross weight
- Pallet/Box labelling.
- Provision of manual entry to accommodate odd quantity tins in pallets.
- Consolidated report generation for day's packing activities.

10. **Dispatches**

- Checklist generation.
- Provision to enter – Location, Quantity and variety.

11. **Work Order reconciliation and Batch Report**

- Input raw material – Code, quantity.

- Processing – Weighment, Pre-mix - Machine details, process parameters.
- Corrections – Code and quantity.
- Potting.
- Yield - Tins used, broken quantity.
- Packing.
- Net processing time – Start and completion time of the batch
- Despatch details.
- Work Order sign off.

I. General Terms & Conditions:

- This is only an Expression of Interest for identifying a solution for RFID based product tracking system.**
- Last Date for submission of Expression of Interest: The letter of Expression of Interest with supporting documents must be submitted at the following address on or before 1430 hrs on 24/03/2021 for consideration of application in the immediate forthcoming tender.

GENERAL MANAGER (PP)
INK MANUFACTURING UNIT
BHARATIYA RESERVE BANK NOTE MUDRAN (P) LTD.
(Wholly Owned subsidiary of Reserve Bank of India)
Note Mudran Nagar, Mysuru – 570 003
Tel. No: 0821-2469079, 2469081
Fax: 0821-2582955/2582099
EMAIL: trgururaj@brbnmpl.co.in
Website: www.brbnmpl.co.in

- Before submitting Expression of Interest, parties may obtain required clarifications/queries if any, from Ink Manufacturing Unit at Mysuru.
- For security reasons, the firm will be required to provide details of their representative/s who will be contacting/visiting BRBNMPL, Mysore.

II. PROCUREMENT PROCESS:

Following are the details of this procurement process of BRBNMPL.

- (i) At first, the Expression of Interest is being invited from “Manufacturer/Brand Owner/Authorized representatives/Distributors/Dealers/Authorized Agencies of Item” from India.
- (ii) BRBNMPL has the rights to procure additional information from the applicant/s.
- (iii) Bidder may visit BRBNMPL for better understanding of the process before submitting their proposal.
- (iv) Technical specification will be drafted based on the information obtained from this EOI.
- (v) A two-part open bid tender will be floated for this procurement.

III. QUALIFYING CRITERIA:

The following are the Qualifying Criteria which must be fulfilled by the intending Applicants:

1. Bidder shall have competence and capability to execute the RFID based product tracking system or similar item.
2. The Bidder should provide names of the companies to which they have supplied the item in the past indicating the quantity supplied during the last five years. (Previous Purchase Order copies to be enclosed).
3. Presently, Bidder should be in the field of same business.

IV. OTHER REQUIREMENTS FOR THE APPLICANTS

- a) The Applicant should provide names of the companies to which they have supplied the item in the past indicating the quantity supplied during the last five years. (Previous Purchase Order copies to be enclosed).
- b) The applicant shall clearly indicate in the EOI if any patent or other proprietary rights are involved for the material and if so whether the applicant has unlimited legal rights to deal with them/use them. The applicant shall completely indemnify and hold harmless the Purchaser from and against any claims of infringement of any patent from any source. The abuse of patent rights resulting in cartel formation could lead to permanent disqualification of the applicant. The Purchaser reserves the right to take such action as deemed fit over the same, without assigning any reason thereof.
- c) BRBNMPL will be entitled to seek additional documents / information from any Applicant at any point in time.

- d) All experience, past performance, capacity/capability related data and other necessary declarations should be certified by the authorized signatory of the Applicant.

V. GENERAL INSTRUCTIONS FOR THE APPLICANT

- a) The applications as per enclosed format, are to be submitted in a sealed cover super scribing on the top of the cover “Expression of Interest for the Solution for RFID based Product Tracking System” and to be submitted to The General Manager (PP), Ink Manufacturing Unit, BRBNMPL, Note Mudran Nagar, Mysuru – 570003 by 1430 hrs. IST on or before 24/03/2021.
- b) BRBNMPL will not be responsible for any delay in delivery of bids.
- c) The changes/Amendment to this document will be updated in our website (www.brbnmpl.co.in) only.

Submission of Expression of Interest - Timelines:

- a) Last date & time for receipt of EOI: On or before 1430 hours (IST) on 24/03/2021.
- b) Date and time of opening EOI applications: 1500 hours (IST) on 24/03/2021.
- c) In the event of any of the above mentioned dates being declared as a holiday/ closed day for BRBNMPL, the tenders will be sold / received / opened on the next working day at the appointed time.
- d) Location for submission and opening of bids:

BHARATIYA RESERVE BANK NOTE MUDRAN (P) LTD.

(Wholly Owned subsidiary of Reserve Bank of India)

Note Mudran Nagar, Mysuru – 570 003

ENCLOSURES:

- 1) Annexure A: List of documents required
- 2) Annexure B: Information about the participant company.
- 3) Annexure C: Invitation for Submission of EOI

ANNEXURE – A

No: EOI/001/MYS/IMU-25/2020-21

Dated: 19/02/2021

Details of documents:

The following documents and information shall be submitted together with the Expression of Interest:

- Brief description of the company/organization, including its structure and the number of employees.
- Name of the firm and complete address including branches; if any:
- Status of the firm: Proprietor / Partnership / Regd. Company / Co-op. Society
- Reference list of major clients and projects of similar nature executed in the last 5 years with relevant details like Supply order/LOI/satisfactory performance certificate.
- The applicant should give a declaration that they have not been blacklisted / debarred from dealing by Government of India/BRBNMPL in the past 5 years.
- The applicant is required to submit the undertaking that “the information given in the documents are correct and the applicant is aware that any information provided is found to be false at a later stage, BRBNMPL reserves the right to reject / disqualify the Applicant at any stage of the tendering process without assigning any reason.”
- The Applicant should indicate that authorized signatory is competent and legally authorized to submit the tender and / or to enter into legally binding contract. The bid shall be legally binding on the Applicant and are required to submit the authorization letter to that effect.
- Undertaking that the Applicant is accepting all the terms and conditions of EOI and abides by it without any counter conditions.
- Undertaking that the information given in the documents is correct and the applicant is aware that any information provided is found to be false at a later stage BRBNMPL reserves the right to reject / disqualify the Applicant at any stage of the tendering process without assigning any reason.
- A duly signed and stamped confidentiality statement as given below is to be furnished-
 - “The information contained in the tender document will not, in whole or in part be reproduced, transferred to other documents / electronic media or disclosed to others without written consent of BRBNMPL”.
- The Applicant should provide names of the companies to which they have supplied the item in the past indicating the quantities supplied annually during the last five years. (Previous Purchase Order copies to be enclosed)

ANNEXURE – B

No: EOI/001/MYS/IMU-25/2020-21

Dated: 19/02/2021

INFORMATION ABOUT THE COMPANY (TO BE FILLED IN BY THE FIRMS)

Sl. No	Description	Details to be filled in
1	Name of the company	
2	Year of Incorporation (a copy of the incorporation certificate may be enclosed)	
3	a) Address of the registered office.	
	b) Telephone no(s).	
	c) Fax no(s).	
	d) Web site, e-mail, if any.	
	e) Address of other regional/local office, if any.	
4	a) Name of the authorized representative of the company for coordination of this job	
	b) Telephone no(s).	
	c) Fax no(s).	
	d) E-mail address.	
5	a) Name of the associate JV company, if any	
	b) Address of the registered office of associate co.	
	c) Telephone no(s).	
	d) Fax no(s).	
	e) Website/email etc.,	
6	Current net worth (in INR or equivalent)	
7	Turn over for last three financial years (2017-18, 2018-19, 2019-20)	
8	Any other information, which found necessary for this project	

Date:

Place:

Signature of owner /Authorized representative of the company

ANNEXURE – C

Invitation for Submission of EOI (TO BE FILLED IN BY THE FIRMS)

1. Name of the Organization:
2. Type of the organization:
3. Reference No:
4. EOI Title:
5. Category:
6. Sub category:
7. Date of Announcement:
8. Last date for submission:
9. Broad Description of Work:
10. Pre-Qualification Criteria: (Not Applicable)
11. Bid Documents (if Any): Not Applicable.
12. EOI should be submitted to:

The General Manager (PP),
Ink Manufacturing Unit,
BHARATIYA RESERVE BANK NOTE MUDRAN (P) LIMITED
Note Mudran Nagar,
Mysuru – 570003.