Track Design Directorate

Note No. CT/Welding/EOI

Date. 17.01.2024

Sub: Uploading of EOI for "Reconditioning of wheel burns/scabs and Reconditioning of cupped AT welded joints".

Following open ended EOI is required to be uploaded at RDSO website. Soft copy of EOI for 'Reconditioning of wheel burns/scabs and Reconditioning of cupped AT welded joints "(in pdf format) to be uploaded on RDSO's website is attached. The details are given as under:

SN	Description and/o	or	Related	Uploading	Last Date/
	specification		Directorate	Date	Submission
					Date
1	Reconditioning of whe burns/scabs an Reconditioning of cupped A welded joints.	nd	Track Design	17.01.2024	Open ended

A soft copy (in pdf format) above EOI 'Reconditioning of wheel burns/scabs and Reconditioning of cupped AT welded joints" is being sent through email at rdsoexchange@rdso.railnet.gov.in. For uploading on RDSO's website www.rdso.indianrailways.gov.in - Track Design

It is, therefore, requested that necessary action may be taken for uploading, above mentioned on RDSO website www.rdso.indianrailways.gov.in at HOME PAGE under 'Expression of Interest (EOI).

This has the approval of PED/Infra-1/RDSO.

Encl.: As above

Digitally signed by RAJEEV

PACHAURI

Date: 2024.01.17 12:10:09 +05'30' (Rajeev Pachauri)

ADE/RW/Track

ADE/TMS

Government of India Ministry of Railways Research Designs and Standards Organization (RDSO) Manak Nagar, Lucknow-226011

Expression of Interest (EOI) No. CT/Welding/EOI -2024

Ministry of Railways, Research Designs and Standards Organization (RDSO), Lucknow, is interested in exploring the firms, who have the requisite proven technology/ indigenous technology for "Reconditioning of wheel burns/scabs and Reconditioning of cupped AT welded joints" on Indian Railway and which can ensure a service life of 25 GMT (minimum) on each reconditioning, along with details etc. Firms interested for the above item are requested see the details **RDSO** website to on www.rdso.indianrailways.gov.in at HOME PAGE under 'Expression of Interest (EOI)'.

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Date: 2024.01.15 15:23:31 +05'30'

Director/Track-V for Director General (Track) RDSO, Lucknow

भारत सरकार रेल मंत्राालय अनुसंधान अभिकल्प एवं मानक संगठन मानक नगर, लखनऊ—226011

रूचि की अभिव्यक्ति (ईओआई)

संख्याः सीटी / वेल्डिंग / ईओआइ–2024

भारत सरकार, रेल मंत्राालय, अनुसंधान अभिकल्प एवं मानक संगठन, मानक नगर, लखनऊ ऐसी फर्मी को आमंत्रित करती है, जिनके पास व्हील वर्न / स्केंब्ड रेलों एवं कप्ड एटी वेल्डेड जोड़ो की रिकन्डीशनिंग की सिद्ध तकनीक या स्वदेशी तकनीक उपलब्ध हो और जो प्रत्येक रिकन्डीशनिंग के बाद 25 जीएमटी (मिनीमम) की सेवा अवधि की गारन्टी एवं अन्य विवरण जो कि आरडीएसओ की वेबसाइट पर उपलब्ध हो, के साथ देने को इच्छुक हों। उक्त तकनीक देने में रूचि रखने वाली फर्मों से अनुरोध किया जाता है कि वह आरडीएसओ की वेबसाइट www.rdso.indianrailways.gov.in के होमपेज पर प्रदर्शित होने वाले 'EOI' शीर्षक के तहत विवरण देखें।

Digitally signed by RAJEEV PACHAURI Date: 2024.01.15 15:25:13 +05'30'

निदेशक / रेलपथ—5 महानिदेशक / रेलपथ के लिए आरडीएसओ, लखनऊ

Research Designs and Standards Organization (RDSO)

Instructions/ Guidelines for the firms expressing their interest against Expression of Interest (EOI)

- 1. Disclaimer: Indian Railways reserves the right not to proceed with the process or at a later stage to change the process as per the requirements of Indian Railways. It also reserves the right to decline to discuss the process further with any party expressing interest. This EOI shall not be considered in any way a proposal for procurement of technology for "Reconditioning of wheel burns/scabs and Reconditioning of cupped AT welded joints" on Indian Railway (IR). The intending participants will furnish the offer at their own cost and no claims, whatsoever, in this reference will be entertained by the Railways.
- 2. The purpose of this EOI is to explore the various technologies in the field of "Reconditioning of wheel burns/scabs and Reconditioning of cupped AT welded joints", which meet the requirements of 25 GMT (min) service life and suitable for use on Indian Railway Network under prevailing and envisaged operating conditions.
- The interested firms should be either Indian firm offering indigenous technology OR should have agreement with some foreign firms who have proven technology on World Railway System.
- 4. In case the offered proposal is claimed to be patented one, the firm will submit the patent registration details and documents/drawings in support of the same.
- 5. In case the offered proposal is claimed to be non-patented or free from IPR, the firm will submit undertaking (notarized affidavit) that the same has been developed by them and not copied from an existing product /offer/drawing, it does not violate any valid/live patent and the same is not patented/developed by any other firm(s).
- 6. The firm will also be required to indemnify Indian Railways as per proforma given in Appendix-1 against any possible dispute/litigation in future pertaining to IPR infringement of any product / technology / offer. RDSO reserves all the rights under this exercise. In case of any doubt/dispute, the decision of RDSO shall be final.
- 7. Interested firms satisfying the required conditions should apply to express their interest with requisite information in duplicate to the Director/Track-V, Anusandhan Bhawan, Track Design Directorate, RDSO, Manak Nagar, Lucknow 226011 (INDIA).
- 8. Interested firms must furnish the application form and details in duplicate as per the "FORMAT FOR LETTER OF RESPONSE" enclosed as Appendix-2.
- 9. Interested firms should submit technical information/details of their technology in the format enclosed as Appendix -3.
- 10. For any assistance may please contact on any working day at telephone No. 0522-2450960.
- 11. RDSO reserves all the rights of this exercise. In case of any doubt/dispute, decision of RDSO shall be final.

Digitally signed by RAJEEV PACHAURI Date: 2024.01.15 15:30:22 +05'30' (To be given on non-judicial stamp paper of appropriate value, duly notarized)

UNDERTAKING FOR INDEMNITY AGAINST INFRINGEMENT OF IPR/PATENT /REGISTERED DESIGN/TRADEMARK

I......son ofresident of

 	the deponent do hereby solemnly affirm and undertake as under:
	The deponent is the authorized signatory of the (name of
2	firm/company) as per the documents enclosed. The deponent declares on behalf of the firm/company that it has developed
۷.	the (product description) hereinafter referred to as "the product" and approached the Indian Railway (IR) /RDSO for field trial and use of these products

3. The deponent declares that the aforesaid product including technology and consumables, is a patented product and the deponent has a complete legal authority to use it. It is also declared that the offered product does not infringe IPR of any other firm / body etc. and has not been developed by some other firm.

OR

on Indian Railways.

The deponent declares that the aforesaid product including technology and consumables developed by them is not a patented product and not protected under any copyright, brand, IPR etc. and currently there are no pending legal or any other disputes pertaining to the product. It is also declared that the offered product does not infringe IPR of any other firm / body etc. and has not been developed by some other firm.

4. On behalf of the firm/company, the deponent hereby indemnifies RDSO/IR and its authorized agents/vendors (which interalia includes the Zonal Railways, Public Sector Undertakings under Ministry of Railways and Vendors developed by RDSO/Indian Railways) fully at all times from any possible litigation, claims, its cost and expenses/financial liability arising out of any violation/infringement of IPR/patent/registered design/trademark of any product/item of any other firm/company/vendor/organization located both in India and abroad for the duration of use of the said product on the Indian Railways/its units.

Deponent

Verification

I declare that the contents of aforesaid Para 1 to 4 are true to my knowledge and belief, and nothing has been concealed. I understand that furnishing of any false information in above undertaking or concealing information will lead to legal and administrative and legal action against the firm/company.

Digitally signed by RAJEEV PACHAURI Date: 2024.01.15 15:33:54 +05'30'

FORMAT FOR LETTER OF RESPONSE

Re	espo	ondents Ref. No.:
Di Ro Bu Re	oom uildir esea	or/Track-V, No.: 7 ng: Anushandhan Bhavan arch Designs & Standards Organization, Ministry of Railways k Nagar, Lucknow-226011
De	ear S	Sir,
		Subject: RESPONSE TO – EOI FOR PARTICIPATION
1.		e, the undersigned, offer the following information in response to the Expression of erest sought by you vide your Notification Nodated
2.		e are duly authorized to represent and act on behalf ofereinafter the "respondent")
3.		e have examined and have no reservations to the EOI Document including Addenda o(s).
4.	We	e are attaching with this letter, the copies of original documents defining: -
	a)	The Respondent's legal status;
	b)	Its principal place of business;
	c)	Its place of incorporation (if respondents are corporations); or its place of registration (if respondents are cooperative institutions, partnerships or individually owned firms);
	d)	Self certified financial statements of Last three years, clearly indicating the financial turnover and net worth.
	e)	Copies of any market research, business studies, feasibility reports and the like sponsored by the respondent, relevant to the project under consideration
5.	We rep	e shall assist Ministry of Railways (MoR) and/or its authorized presentatives to obtain further clarification from us, if needed.

S. No.	Contact Name	Address	Telephone	E Mail

a) RDSO and/or its authorized representatives may contact the following nodal persons for further information on any aspects of the Response:

Digitally signed by RAJEEV PACHAURI

Date: 2024.01.15 15:37:19 +05'30'

- 6. This application is made in the full understanding that:
 - a) Information furnished in response to EOI shall be used confidentially by RDSO for the purpose of development of the project.
 - b) RDSO reserves the right to reject or accept any or all applications, cancel the EOI and subsequent bidding process without any obligation to inform the respondent about the grounds of same.
 - c) We confirm that we are interested in participating in development of the project.
- 7. We certify that our turnover and net worth in the last three years is as under:

Financial Year	Turn over	Net worth	

- 8. In response to the EOI we hereby submit the following additional details annexed to this application.
 - 8.1 Details of various items being manufactured/consultancy undertaken.
 - 8.2 Details of customer(s) and supplies made in the field "Reconditioning of wheel burns/scabs and Reconditioning of cupped AT welded joints."
 - 8.3 Experience and expertise in the field "Reconditioning of wheel burns/scabs and Reconditioning of cupped AT welded joints."
 - 8.4 Details of manpower with their qualification and experience.
 - 8.5 Detailed proposal for "Reconditioning of wheel burns/scabs and Reconditioning of cupped AT welded joints" including similar alternative proposal, if any.
 - 8.6 Details of Intellectual Property Rights (IPR) held, patent filed/held and MoU/agreement signed.
 - 8.7 Details of ISO certification.
 - 8.8 Undertaking as per Annexure-A of Appendix-2
- 9. The undersigned declare that the statements made and the information provided in the duly completed application are complete, true and correct in every detail. We also understand that in the event of any information furnished by us being found later on to be incorrect or any material information having been suppressed, RDSO may delete our name from the list of qualified Respondents. We further understand that RDSO will give first preference to the applicants considered relevant for the purpose.

10. Our respons Yours sincer	e is valid till (date in figures and words):ely,
(Sign) Name In the Capac	city of duly authorized to sign the response for and on behalf of M/s
Date seal	Digitally signed by RAJEEV

PACHAURI
Date: 2024.01.15 15:39:50 +05'30'

(To be taken on non-judicial stamp paper of appropriate value as applicable in the respective state and dully notarized & witnessed)

<u>UNDERTAKING</u>

I, son of	aged about	Year's resident of	do hereby	y solemnly
affirm as under				

- 1. That the deponent is the Authorized signatory of (Name of the Sole Proprietorship Concern/ Partnership Firm/ Registered Company/ Joint Venture).
- 2. That the deponent declares on behalf of (Name of the Sole Proprietorship Concern/ Partnership

Firm/ Registered Company/Joint Venture) that:

- a) In regard to matters relating to the security and integrity of the country, no charge sheet has been filed by an agency of the Government / conviction by a Court of Law for an offence committed by the ------(name of the entity) or by any sister concern of the ------(name of the entity) which would result in disqualification.
- b) In regard to matters other than the security and integrity of the country, ------(name of the entity) has not been convicted by a Court of Law or indicted / passed any adverse order by a regulatory authority against it or it's any sister concern which relates to a grave offence, or would constitute disqualification. Grave offence is defined to be of such a nature that it outrages the moral sense of the community.

DEPONENT

VERIFICATION

I declare that the contents of para 1 to 2 above are true as per my knowledge and nothing has been hidden.

DEPONENT

Digitally signed by RAJEEV PACHAURI Date: 2024.01.15 15:41:39 +05'30'

GOVERNMENT OF INDIA MINISTRY OF RAILWAYS

RESEARCH DESIGNS & STANDARDS ORGANISATION (RDSO)

Technical information & requirements

(To be prepared in duplicate)

- 1. Name & address of the firm (Work executing agency):
- 2. Name and address of the OEM firm:
- 3. Particulars of the brand/ brands of welding consumables offered for trial (Please enclose complete technical literature, photograph, drawing of welding machine & their consumables along with details like Chemical Composition of weld metal (range), hardness range, micro structure details, etc. along with Batch Test Certificate (BTC).:

3.1. Name of brand :

- 3.2. Type of consumable/technology :
- 3.3. Claimed Gross Million Tonne of Traffic (GMT) of service (Min.)
- 3.4. Code No. as per BIS (if any)
- 3.5. BIS Specn. No. & Year :
- 3.6. Specification of welding Consumables & Code (if any)
- 3.7. Details of machines used
- 4. (i) Whether the brand/brands is in use on Indian Railways/World Railways for "Reconditioning of wheel burns/scabs and Reconditioning of cupped AT welded joints"
 - (ii) If yes, please enclose the performance certificate from user Railways in terms of GMT and general behavior.
- 5. The firm shall submit detailed procedure of "Reconditioning of wheel burns/scabs and Reconditioning of cupped AT welded joints" along with necessary precautions to be taken before, during the "Reconditioning of wheel burns/scabs and Reconditioning of cupped AT welded joints".
- 6. I/We understand that:
 - 6.1 Technical scrutiny of documents shall be carried by RDSO and more information/documents may be asked in this regard, if considered necessary at any stage.
 - 6.2The firm shall give a technical representation at RDSO and practical demonstration in RDSO/ suitable yard for better appreciation of their technology for "Reconditioning of wheel burns/scabs and Reconditioning of cupped AT welded joints". Lab test of the welding consumables shall be carried out by RDSO on weld pad samples deposited on rail steel. Chemical composition of weld metal, hardness test and evaluation of microstructure (microstructure shall be fine pearlite in HAZ without formation of any crack, martensite and bainite in weld metal and HAZ), shall be verified by RDSO.

Digitally signed by RAJEEV PACHAURI Date: 2024.01.15 15:44:48 +05'30' 6.3 After necessary satisfactory testing & successful practical demonstration etc. at RDSO, firms shall be allowed for conducting field trial of the technology as under:

The firm shall be allowed for the field trial of the technology on any of the IR routes, to be conducted on two Zonal Railways by reconditioning 25 wheel burnt/scabbed rail spots and 25 Cupped AT weld joints i.e. 50 spots on each of the two Railways, to ensure the service life of 25 GMT (minimum). Guidelines for the field trial and acceptance criteria for field trial shall be as per attached Appendix – 4. Performance monitoring format is given at Appendix-5

6.4 RDSO may select and decide the Zonal Railways for carrying out the effective field trial of the technologies offered under both the above categories. Once the field trial is found satisfactory on both the Railways, the firm shall be permitted to use the technology on Indian Railway network.

I/We have read the above carefully & abide with the stipulations and further declare that the information furnished by me/us in this form is correct.

Encl:

Digitally signed by RAJEEV PACHAURI Date: 2024.01.15 15:46:41 +05'30'

Signature with date of firm's competent person

Name/s in capital with designation and seal

GOVERNMENT OF INDIA MINISTRY OF RAILWAYS

RESEARCH DESIGNS & STANDARDS ORGANISATION (RDSO)

- 1 Performance and Acceptance Criteria: Monitoring of reconditioned spots shall be done jointly by M&C and Track Directorate of RDSO. Every three months from the time of reconditioning, inspection report shall be submitted to competent authority of M&C and Track Directorate. If any defect as mentioned in Para 2.1 below, observed on reconditioned spots before achieving 25 GMT, the trial shall be discontinued and firm shall be required to apply afresh after taking necessary steps to improve their product/technique.
- 2 Final inspection will be carried out jointly by M&C and Track Directorate of RDSO when the reconditioned spots have earned 25 GMT (min). The performance shall be evaluated as below:
- 2.1 The reconditioned spots shall earn minimum 25 GMT satisfactorily with

No surface defects (To be checked by Dye-Penetration Test)

No metal chipping

No cracks, (To be checked by Dye-Penetration Test) and

No appreciable wear (not exceeding 0.1 mm) when measured with a filler gauge and a 10 cm straight gauge.

- 2.2 The reconditioned spots shall be reasonably smooth.
- 2.3 Pre-USFD testing: Pre-USFD testing shall be conducted on the spots to ensure rail is free from internal defects. USFD testing shall be carried out by RDSO approved Weld Testing Machine & RDSO certified USFD operator of Zonal Railways in presence of Firm's representative as per stipulations of "Manual for Ultrasonic Testing Of Rails And Welds, Revised-2022".
- 2.4 Post-USFD testing: Post-USFD testing shall be conducted on the reconditioned spots to ensure the quality and reliability of the repairing of Wheel Burns/Scabs or Cupped AT welding joints. USFD testing shall be carried out by RDSO approved Weld Testing Machine & RDSO certified USFD operator of Zonal Railways in presence of Firm's representative as per stipulations of "Manual for Ultrasonic Testing Of Rails And Welds, Revised-2022." All the reconditioned spots shall be free from internal defect.
- 2.5 **Re test**: In case a maximum of one reconditioned wheel burnt/scabbed and/or one cupped A.T. weld joint fails on the basis of acceptance criteria, this clause shall be applied for evaluation of performance before arriving at the final decision. Double the number i.e. two spots shall again be reconditioned and subsequently monitored and finally inspected following the same procedure afresh. Consequently both such spots must pass, only then the trial shall be considered to be successful. If any one of these two spots fails, the trial shall be considered to be unsuccessful and the product shall be rejected.

2.6 Failure of more than one reconditioned wheel burnt/scabbed and/or one cupped A.T. weld joint of field trial (Including Ultrasonic examination) will render the technique unacceptable and firm shall be required to apply afresh after taking necessary steps to improve their product/technique.

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Appendix-5

PROFORMA FOR MEASUREMENT OF DIMENSIONS OF RECONDITIONED SPOTS OF AT WELD CUPPED JOINTS /WHEEL BURNS/SCABBED RAILS

(1) Name of Firm:		(2) Name of Technology:
(3) Railway:	(4) Division:	(5) Block Section:

(6) Rail Section: (7) Date of Inspection:

S. No.	T.P. KM	Reconditioned Area (Length (mm) & Breadth (mm))	Date of Reconditioning	UP/ DN	LR/ RR	GMT of Route	GMT earned/ passed	Surface Condition (Visual)	Remarks

Digitally signed by RAJEEV PACHAURI

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Signature of Railway's Official with Designation

Date: 2024.01.15 15:51:49 +05'30'

Countersigned By: