

Request for Proposals (RFP)

The provision of services to support with “IP development and Technology Transfer” for three foundries in KZN area

RFP No. 1035/17/10/2022

Date of Issue	Monday, 03 October 2022	
Last Date for submission of queries	Monday, 10 October 2022	
Closing Date	Monday, 17 October 2022	
Place	tender@csir.co.za	
Enquiries	Strategic Procurement Unit	E-mail: tender@csir.co.za
CSIR business hours	08h00 – 16h30	
Category	Professional Services	

TABLE OF CONTENTS

SECTION A – TECHNICAL INFORMATION	3
1 INTRODUCTION	3
2 BACKGROUND	3
3 INVITATIONS FOR PROPOSAL	4
4 PROPOSAL SPECIFICATION	4
5 PROJECT SCOPE	4
7 FUNCTIONAL EVALUATION CRITERIA	6
8 ELIMINATION CRITERIA	7
9 NATIONAL TREASURY CENTRAL SUPPLIER DATABASE (CSD) REGISTRATION	7
SECTION B – TERMS AND CONDITIONS	8
10 VENUE FOR PROPOSAL SUBMISSION	8
11 TENDER PROGRAMME	8
12 SUBMISSION OF PROPOSALS	8
13 DEADLINE FOR SUBMISSION	8
14 AWARDING OF TENDERS	9
15 EVALUATION PROCESS	9
16 PRICING PROPOSAL	9
17 VALIDITY PERIOD OF PROPOSAL	10
18 APPOINTMENT OF SERVICE PROVIDER	10
19 ENQUIRIES AND CONTACT WITH THE CSIR	10
20 MEDIUM OF COMMUNICATION	10
21 COST OF PROPOSAL	11
22 CORRECTNESS OF RESPONSES	11
23 VERIFICATION OF DOCUMENTS	11
24 SUB-CONTRACTING	12
25 ENGAGEMENT OF CONSULTANTS	12
26 TRAVEL EXPENSES	12
27 ADDITIONAL TERMS AND CONDITIONS	12
28 CSIR RESERVES THE RIGHT TO	13
29 DISCLAIMER	13
DECLARATION BY TENDERER	15
30 ANNEXURE A	16

SECTION A – TECHNICAL INFORMATION

1 INTRODUCTION

The Council for Scientific and Industrial Research (CSIR) is one of the leading scientific research and technology development organisations in Africa. In partnership with national and international research and technology institutions, CSIR undertakes directed and multidisciplinary research and technology innovation that contributes to the improvement of the quality of life of South Africans. The CSIR's main site is in Pretoria while it is represented in other provinces of South Africa through regional offices.

2 BACKGROUND

The National Foundry Technology Network (NFTN) exists to support the South African foundry industry become more competitive and sustainable. As an initiative of the South African national government, through the Department of Trade, Industry and Competition (**the dtic**) the NFTN has the following mandate: To increase the global competitiveness of the South African foundry industry through the provision of appropriate services, in order to reduce import leakage, increase local production, and increase investment in the sector. The mission of the NFTN has been and remains to manage, coordinate, and facilitate economic development towards a revitalisation of foundry industry through appropriate skills training, knowledge transfer, and diffusion of state-of-the art technologies

The NFTIN's Objectives and Approach for the 2022/23, is to address these 5 impact areas

1. Support sector and firm efficiencies and compliance to ensure **sector sustainability**.
2. Encourage localisation and robust supply chains to increase **market access**.
3. Facilitate the establishment and delivery of effective, relevant sector **skills development interventions**.
4. Develop and support the latest local technologies through relevant and focused **research and development**.
5. Build mutually beneficial and productive relationships, through awareness-raising and **stakeholder engagement**.

This RFP is to address objective 2, through the proposed intervention at industry level and falls within the NFTN's Mandate as part of the Competitiveness Improvement Program through IP development and Technology Transfer to benefit various foundries that supply pumps and valves.

A group of foundries three (3) are based in KZN area of which two in Durban and one in Pietermaritzburg are to be added to the ongoing project. The NFTN starting by supporting a group of foundries that are linked with **Weir Minerals South Africa** and rolling out the intervention to foundries that are using similar products and material. These three foundries also require advancing the following area of focus that will guarantee production quality of pumps and valves:

- Melting control technique
- Melt treatment method
- Inoculation practice and
- Casting conditions

3 INVITATIONS FOR PROPOSAL

Proposals are hereby invited for the supply of services to develop an IP that recommends the most suitable: Melting control technique, Treatment method, inoculation practice and Casting condition for production of high-quality Weir Minerals South Africa's Pumps and Valves. The IP will cover the graphite nodule characteristics, the nodule count, determine the correct nodularity to improve Mechanical performance of SG Iron and steel products also to control the solidification process within the thin-walled section of castings.

4 PROPOSAL SPECIFICATION

All proposals are to be submitted in a format specified in this enquiry (if applicable). However, tenderers are welcome to submit additional / alternative proposals over and above the originally specified format.

5 PROJECT SCOPE

The project is aimed to develop, and IP following technical analysis of Spheroidal Graphite Cast Iron and recommend the most suitable melting control technique, treatment method, inoculation practice and casting conditions of required pumps and valve. Therefore, it will comprise a combination of research (qualitative, quantitative and desktop) and analysis that will ultimately result in generating and IP for the beneficiaries to supply high quality products. the compilation of an industrial enterprise guideline. The appointed service provider that has facilities such as Physical Metallurgy Laboratory essential for Metallographic evaluation, Chemical analysis (Optical emission spectrographic, carbon-

Sulphur analyzer), and Mechanical testing facilities, otherwise **institutions such as Academic, Science councils** etc.... is preferable to cover requisite experience as detailed in the RFP.

6 PROJECT DELIVERABLES

- Evaluate Metallurgical, chemical, and Mechanical properties of cast products
- Establish technical analysis of melting conditions at plant level
- Proposed integrated melting techniques
- Determine and recommend the most suitable melting control technique, treatment method, inoculation practice and casting conditions of required pumps and valve
- Provide an IP in a form of a guide that plants will be using to guarantee production of quality pump and valve castings.

6.1 Implementation

It is anticipated that the winning bidder will work in close corporation and consultation with the NFTN Technical Project Manager and the foundry representatives throughout the duration of the project. The winning bidder will be required to physically collect information or data at the foundry, and schedule meetings with the foundry to complete any questionnaires or forms, to eliminate delays in the process. The winning bidder must be fully responsible for data or sample collection and any testing and analysis. The foundry will not be responsible for gathering any monitoring data or for providing any equipment required for research and analysis, since the project will rely on physical data collection and provision of the testing equipment and Metallographic and Mechanical Laboratory facilities for analysis

There will be 3 compulsory meetings at the foundry which all project team members must attend, one being the project kick-off meeting, progress meeting and project closure meetings. The bidder must ensure that they budget for any other visits to the foundry besides the above-mentioned compulsory meetings. These meetings will be attended by the NFTN Technical Project Manager as well. Should there be a need for the winning bidder to install or purchase any monitoring or measuring equipment needed for this project, this must be declared in the bidding cost and no private equipment may be sold to the foundry without the knowledge of the NFTN.

It is anticipated that the project will commence upon acceptance and signing of the contract with the appropriate specialist appointed by the NFTN, and it is expected that the project will be carried out between October 2022 to April 2023.

6.1 Project Schedule

It is anticipated that the project will commence upon acceptance and signing of the contract with the appropriate specialist appointed by the NFTN, and it is expected that the project will be carried out to April 2023.

7 FUNCTIONAL EVALUATION CRITERIA

This Request for Proposals requires interested Specialist in the field of Physical Metallurgy and Foundry Technology **preferably an Academic, Science council or other research, institutions** to submit a portfolio of evidence, outlining activities and experience in the field of high pressure die casting centralising or focusing on refurbishment and retro fitting of hot chamber high pressure die casting machines

The evaluation of the functional / technical detail of the proposals will be based on the following criteria:

Competence	Criterion	Weight
Knowledge of the foundry industry and of the Metallurgy of pumps and valves component products	Experience of working in the foundry industry specifically in field of Physical Metallurgy. Experience with grain size analysis of Spheroidize Cast Iron	30%
Proposed Project Plan	Project Plan – Clearly indicating all project milestones, deliverables, timeframe, and costs	10%
Project Risk Plan	Project Risk Plan for IP development for foundries in area of Melting shop	10%
Knowledge of grain size analysis of Spheroidize Graphite	Indication of software to be used for technical analysis of SG products	30%
Past Project References	Past Project References: IP development for foundries in area of Melting shop	20%

7.1 Proposals with functionality / technical points of less than the pre-determined minimum overall percentage of 70 % and less than 50 % on any of the individual criteria will be eliminated from further evaluation.

7.2 Refer to Annexure A for the scoring sheet that will be used to evaluate functionality.

8 ELIMINATION CRITERIA

Proposals will be eliminated under the following conditions:

- Bidders that submit late bids will not be considered.
- Bidders that submit to the incorrect location or email address will be eliminated.
- Bidders that are listed on the NT database of restricted suppliers will not be considered.
- Bidders that are registered on the NT Register of Tender Defaulters will not be considered.
- Bidders that do not submit a fully completed and signed SBD 1 and SBD 4 Forms will not be considered.

9 NATIONAL TREASURY CENTRAL SUPPLIER DATABASE (CSD) REGISTRATION

Before any negotiations will start with the winning bidder it will be required from the winning bidder to:

- be registered on National Treasury's Central Supplier Database (CSD). Registrations can be completed online at: www.csd.gov.za;
- provide the CSIR of their CSD registration number; and
- provide the CSIR with a (SANAS approved) copy of their B-BBEE certificate. If no certificate can be provided, no points will be scored during the evaluation process. (RSA suppliers only)

SECTION B – TERMS AND CONDITIONS

10 VENUE FOR PROPOSAL SUBMISSION

All proposals must be submitted to tender@csir.co.za The title and the RFP number must be clearly stipulated on the subject.

Mail size is 25MB, send multiple emails when exceeded.

11 TENDER PROGRAMME

The tender program, as currently envisaged, incorporates the following key dates:

- Issue of tender documents: 03 October 2022
- Last date for submission of queries: 10 October 2022
- Closing / submission Date: 17 October 2022
- Estimated contract duration (in months/years) 4 months

12 SUBMISSION OF PROPOSALS

12.1 All submissions are to be submitted electronically @ tender@csir.co.za

12.2 All submissions are to be clearly marked with the RFP number on the subject line of the email submission. Proposals must consist of two parts, each of which clearly marked:

PART 1: Technical Proposal: RFP No.:1035/17/10/2022

PART 2: Pricing Proposal, B-BBEE and other Mandatory Documentation:
RFP No.1035/17/10/2022

12.3 Proposals submitted by companies must be signed by a person or persons duly authorised.

12.4 The CSIR will award the contract to qualified tenderer(s)' whose proposal is determined to be the most advantageous to the CSIR, taking into consideration the technical (functional) solution, price and B-BBEE.

13 DEADLINE FOR SUBMISSION

Proposals shall be submitted at the email address mentioned above no later than the closing date of 17 October 2022 during CSIR's business hours. The CSIR business hours are between 08h00 and 16h30.

Where a proposal is not received by the CSIR by the due date and stipulated place, it will be regarded as a late tender. Late tenders will not be considered.

14 AWARDING OF TENDERS

Awarding of tenders will be published on the CSIR's tender website. No regret letters will be sent out.

15 EVALUATION PROCESS

15.1 Evaluation of proposals

All proposals will be evaluated by an evaluation team for functionality, price and B-BBEE. Based on the results of the evaluation process and upon successful negotiations, the CSIR will approve the awarding of the contract to successful tenderers.

A two-phase evaluation process will be followed.

- The first phase includes evaluation of **elimination** and **functionality criteria**,
- The second phase includes the evaluation of **price** and **B-BBEE** status.

Pricing Proposals will only be considered after functionality phase has been adjudicated and accepted. Only proposals that achieved the specified minimum qualification scores for functionality will be evaluated further using the preference points system.

15.2 Preference points system

The 80/20 preference point system will be used where 80 points will be dedicated to price and 20 points to B-BBEE status. If all tenders received are more than R50m, the proposal will be cancelled and re-issued.

16 PRICING PROPOSAL

16.1 Pricing proposal must be cross-referenced to the sections in the Technical Proposal. Any options offered must be clearly labelled. Separate pricing must be provided for each option offered to ensure that pricing comparisons are clear and unambiguous.

16.2 Price needs to be provided in South African Rand (excl. VAT), with details on price elements that are subject to escalation and exchange rate fluctuations clearly indicated.

16.3 Price should include additional cost elements such as freight, insurance until acceptance, duty where applicable.

16.4 Only firm prices* will be accepted during the tender validity period. Non-firm prices** (including prices subject to rates of exchange variations) will not be considered.

**Firm price is the price that is only subject to adjustments in accordance with the actual increase or decrease resulting from the change, imposition, or abolition of customs or excise*

duty and any other duty, levy, or tax which, in terms of a law or regulation is binding on the contractor and demonstrably has an influence on the price of any supplies, or the rendering costs of any service, for the execution of the contract.

***Non-firm price is all prices other than “firm” prices.*

16.5 Payment will be according to the CSIR Payment Terms and Conditions.

17 VALIDITY PERIOD OF PROPOSAL

Each **proposal** shall be valid for a minimum period of six (6) months calculated from the closing date.

18 APPOINTMENT OF SERVICE PROVIDER

18.1 The contract will be awarded to the tenderer who scores the highest total number of points during the evaluation process, except where the law permits otherwise.

18.2 Appointment as a successful service provider shall be subject to the parties agreeing to mutually acceptable contractual terms and conditions. In the event of the parties failing to reach such agreement CSIR reserves the right to appoint an alternative supplier.

18.3 Awarding of contracts will be announced on the National Treasury website and no regret letters will be sent to unsuccessful bidders.

19 ENQUIRIES AND CONTACT WITH THE CSIR

Any enquiry regarding this RFP shall be submitted in writing to CSIR at tender@csir.co.za with ***“RFP No 1035/17/10/2022 The provision of services to support with “IP development and Technology Transfer” for three foundries in KZN area”*** as the subject.

Any other contact with CSIR personnel involved in this tender is not permitted during the RFP process other than as required through existing service arrangements or as requested by the CSIR as part of the RFP process.

20 MEDIUM OF COMMUNICATION

All documentation submitted in response to this RFP must be in English.

21 COST OF PROPOSAL

Tenderers are expected to fully acquaint themselves with the conditions, requirements and specifications of this RFP before submitting proposals. Each tenderer assumes all risks for resource commitment and expenses, direct or indirect, of proposal preparation and participation throughout the RFP process. The CSIR is not responsible directly or indirectly for any costs incurred by tenderers.

22 CORRECTNESS OF RESPONSES

22.1 The tenderer must confirm satisfaction regarding the correctness and validity of their proposal and that all prices and rates quoted cover all the work/items specified in the RFP. The prices and rates quoted must cover all obligations under any resulting contract.

22.2 The tenderer accepts that any mistakes regarding prices and calculations will be at their own risk.

23 VERIFICATION OF DOCUMENTS

23.1 Tenderers should check the numbers of the pages to satisfy themselves that none are missing or duplicated. No liability will be accepted by the CSIR in regard to anything arising from the fact that pages are missing or duplicated.

23.2 One electronic copy (email only) of each proposal (Technical and Financial) must be submitted

23.3 Pricing schedule and B-BBEE credentials should be submitted with the proposal, but as a separate document and no such information should be available in the technical proposal.

23.4 If a courier service company is being used for delivery of the proposal document, the RFP description must be endorsed on the delivery note/courier packaging to ensure that documents are delivered to the tender box, by the stipulated due date.

24 SUB-CONTRACTING

- 24.1 A tenderer will not be awarded points for B-BBEE status level if it is indicated in the tender documents that such a tenderer intends sub-contracting more than **25%** of the value of the contract to any other enterprise that does not qualify for at least the points that such a tenderer qualifies for, unless the intended sub-contractor is an exempted micro enterprise that has the capability and ability to execute the sub-contract.
- 24.2 A tenderer awarded a contract may not sub-contract more than **25%** of the value of the contract to any other enterprise that does not have an equal or higher B-BBEE status level than the person concerned, unless the contract is sub-contracted to an exempted micro enterprise that has the capability and ability to execute the sub-contract.

25 ENGAGEMENT OF CONSULTANTS

The consultants will only be remunerated at the rates:

- 25.1 Determined in the "Guideline for fees", issued by the South African Institute of Chartered Accountants (SAICA); or
- 25.2 Set out in the "Guide on Hourly Fee Rates for Consultants", by the Department of Public Service and Administration (DPSA); or
- 25.3 Prescribed by the body - regulating the profession of the consultant.

26 TRAVEL EXPENSES

- 26.1 All travel expenses for the CSIR's account, be it directly via the CSIR's travel agent or indirectly via re-imbursements, must be in line with the CSIR's travel policy. The following will apply:
- 26.1.1 Only economy class tickets will be used.
- 26.1.2 A maximum of R1400 per night for accommodation, dinner, breakfast, and parking will be allowed.
- 26.1.3 No car rentals of more than a Group B will be accommodated.

27 ADDITIONAL TERMS AND CONDITIONS

- 27.1 A tenderer shall not assume that information and/or documents supplied to CSIR, at any time prior to this request, are still available to CSIR, and shall consequently not make any reference to such information document in its response to this request.

27.2 Copies of any affiliations, memberships and/or accreditations that support your submission must be included in the tender.

27.3 In case of proposal from a joint venture, the following must be submitted together with the proposal:

- Joint venture Agreement including split of work signed by both parties.
- The original or certified copy of the B-BBEE certificate of the joint venture.
- The Tax Clearance Certificate of each joint venture member.
- Proof of ownership/shareholder certificates/copies; and
- Company registration certificates.

27.4 An omission to disclose material information, a factual inaccuracy, and/or a misrepresentation of fact may result in the disqualification of a tender, or cancellation of any subsequent contract.

27.5 Failure to comply with any of the terms and conditions as set out in this document will invalidate the Proposal.

28 CSIR RESERVES THE RIGHT TO

28.1 Extend the closing date.

28.2 Verify any information contained in a proposal.

28.3 Request documentary proof regarding any tendering issue.

28.4 Give preference to locally manufactured goods.

28.5 Appoint one or more service providers, separately or jointly (whether or not they submitted a joint proposal).

28.6 Award this RFP as a whole or in part.

28.7 Cancel or withdraw this RFP as a whole or in part.

29 DISCLAIMER

This RFP is a request for proposals only and not an offer document. Answers to this RFP must not be construed as acceptance of an offer or imply the existence of a contract between the parties. By submission of its proposal, tenderers shall be deemed to have satisfied themselves with and to have accepted all Terms & Conditions of this RFP. The CSIR makes no representation, warranty, assurance, guarantee or endorsements to tenderer concerning the RFP, whether with regard to its

accuracy, completeness or otherwise and the CSIR shall have no liability towards the tenderer or any other party in connection therewith.

DECLARATION BY TENDERER

Only tenderers who completed the declaration below will be considered for evaluation.

RFP No:

I hereby undertake to render services described in the attached tendering documents to CSIR in accordance with the requirements and task directives / proposal specifications stipulated in RFP No..... at the price/s quoted. My offer/s remains binding upon me and open for acceptance by the CSIR during the validity period indicated and calculated from the closing date of the proposal.

I confirm that I am satisfied with regards to the correctness and validity of my proposal; that the price(s) and rate(s) quoted cover all the services specified in the proposal documents; that the price(s) and rate(s) cover all my obligations and I accept that any mistakes regarding price(s) and rate(s) and calculations will be at my own risk.

I accept full responsibility for the proper execution and fulfilment of all obligations and conditions devolving on me under this proposal as the principal liable for the due fulfilment of this proposal.

I declare that I have no participation in any collusive practices with any tenderer or any other person regarding this or any other proposal.

I accept that the CSIR may take appropriate actions, deemed necessary, should there be a conflict of interest or if this declaration proves to be false.

I confirm that I am duly authorised to sign this proposal.

NAME (PRINT)

CAPACITY

SIGNATURE

NAME OF FIRM

DATE

WITNESSES

1

2

DATE:

30 ANNEXURE A

Competence	Criterion	Key Aspects of Criterion	Points
Knowledge of the foundry industry and of the Metallurgy of pumps and valves component products [30%]	Experience of working in the foundry industry specifically in field of Physical Metallurgy. Experience with grain size analysis of Spheroidize Cast Iron	10+ years working experience + Proof of 2 proven experience on IP development for foundries in area of Melting shop.	10
		10+ years working experience + Proof of 1 proven experience on IP development for foundries in area of Melting shop.	5
		10 years working experience – no Proof of experience on IP development for foundries in area of Melting shop	0
Proposed Project Plan [10%]	Project Plan – Clearly indicating all project milestones, deliverables, timeframe, and costs	Project Plan – Clear project milestones and deliverables with a timeframe aligned to line-item budget	10
		Project Plan – Clear project milestones and deliverables with a timeframe and summary budget	7
		Project Plan – summary of project milestones and deliverables with a timeframe and summary budget	3
		Project Plan – No project milestones and deliverables with a timeframe and budget	0
Project Risk Plan [10%]	Project Risk Plan for IP development for foundries in area of Melting shop	Detailed project specific Project Risk Plan on IP development for foundries in area of Melting shop.	10
		Brief Summarised Project Risk Plan on IP development for foundries in area of Melting shop.	5
		No Project Risk Plan on IP development for foundries in area of Melting shop.	0
Knowledge of grain size analysis of Spheroidize Graphite [30%]	Indication of software to be used for technical analysis of SG products	Indication of methodology for technical analysis of SG products to be used and that which must have steps aligned to the project plan	10

		No Indication of methodology for technical analysis of SG products to be used and that which must have steps aligned to the project plan	0
Past Project References [20%]	Past Project References: IP development for foundries in area of Melting shop	List of 2 previously managed projects that involved IP development for foundries in area of Melting shop.	10
		List of 1 previously managed project that involved IP development for foundries in area of Melting shop	5
		No List of previously managed projects that involved IP development for foundries in area of Melting shop	0