

Request for proposals (RFP)

The supply of High-Performance Computing Platform to the CSIR

RFP No. 3492/10/12/2021

Date of Issue	Friday, 12 November 2021		
	Friday, 19 November 2021		
	Time: 12:00 -14:00		
Compulsory Briefing Session	Place: Visual,		
	Link:https://zoom.us/j/92118582824?pwd=SE5vZzJSUjkvVUpEN		
	G5NeXIhbjI1UT09		
	CHPC, Rosebank, Cape Town		
Site Inspection (Not compulsory)	Monday, 22 November -Wednesday, 24 November 2021		
	dthobye@csir.co.za		
Last day for questions	Friday, 26 November 2021 at 16:30		
Closing Date and Time	Friday, 10 December 2021 at 16:30		
Tender submission:	Email: tender@csir.co.za		
Only electronic submissions will	If the documents size exceeds 25MB, send multiple emails. Use		
be accepted	the tender number and description as the subject on the email.		
Enquiries	Strategic Procurement Unit	Email: tender@csir.co.za	
CSIR business hours	08h00 - 16h30		
Category	Computer hardware & Software		

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RFP STRUCTURE

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SECTION A - GENERAL RFP TERMS AND CONDITIONS

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.

1.1 National Integrated Cyber Infrastructure System (NICIS)

National Integrated Cyber Infrastructure System (NICIS) promotes scientific and industrial development through the provision of high-performance computing capability, high-speed network capacity and a national research data infrastructure integrated hierarchically into globally connected systems and into local system systems, providing seamless access for the research and education communities of South Africa. It is a national initiative of the Department of Science and Innovation and implemented by the Council for Scientific and Industrial Research (CSIR).

1.2 NICIS Vision

The realisation of a vibrant and competitive knowledge based economy impacting socioeconomic development by enabling education, research, and innovation through shared access to advanced cyberinfrastructure facilities and services.

1.3 NICIS Mission

To provide a world class national integrated cyberinfrastructure system that enables research, innovation and learning comprising a national high performance computing facility, a national research and education network and a national data intensive research infrastructure accessible across the research and higher education sector through integrated eResearch services and the development of relevant human capital.

The Centre for High Performance Computing (CHPC) is one of the three pillars of the NICIS. It provides massive parallel processing capabilities and services to researchers in industry and academia. The other main pillars are the South African National Research Network (SANReN), which provides high-speed connectivity and advanced networking services, as well as the Data Intensive Research Initiative of South Africa (DIRISA), which implements services that enable sound data management practices and support efficient data-driven scientific and engineering discoveries.

Table 1. Bid Information

able 1. Bid inform			
DESCRIPTION	RFP for the supply of High Performance Computing Platform to CSIR		
ACCESS TO	This RFP may be downloaded directly from National Treasury's e-Tender		
THE RFP	Publication Portal at <u>www.etenders.gov.za</u> and <u>https://www.csir.co.za/tender</u>		
ISSUE DATE	Friday, 12 November 2021		
	Friday, 19 November 2021		
COMPULSOR	Time: 12:00 -14:00		
Y TENDER	Place: Visual,		
BRIEFING			
SESSION	Link: https://zoom.us/j/92118582824?pwd=SE5vZzJSUjkvVUpENG5N		
	eXIhbjI1UT09		
CLOSING	Friday, 10 December 2021 at 16:30		
DATE	Friday, 10 December 2021 at 10.50		
	Bidders are to note that the RFP documents will be available for download from		
	Friday, 12/11/2021 on https://www.csir.co.za/tender and or www.etenders.gov.za		
	Once Bidders download the RFP off the Portal, they are required to send their		
	contact details to the following address: tender@csir.co.za		
ISSUE AND	This is to ensure that any required communication in relation to this RFP reaches		
DOWNLOAD	those intending to respond. Furthermore, any addenda to the RFP or clarifications		
DEADLINE	will be published on the e-tender portal. Bidders are required to check the		
	https://www.csir.co.za/tender prior to finalising their bid submissions for any		
	changes or clarifications to the RFP. CSIR will not be held liable if Bidders do not		
	receive the latest information regarding this RFP with the possible consequence of		
	either being disadvantaged or disqualified as a result thereof.		
	All proposals must be submitted to tender@csir.co.za.		
METHOD OF			
SUBMISSION	Please use RFP Number as subject reference) If submissions exceed 25MB multiple		
	emails can be submitted. N.B Please ensure that the Technical Requirements		
LAGEDATE	and Pricing information are submitted on separate folders.		
LAST DATE OF			
SUBMISSION	Friday, 26 November 2021 at 16:30		
OF	Query submissions to be made to tender@csir.co.za		
ENQUIRIES			
	120 Business Days from Closing Date		
	Bidders are to note that they may be requested to extend the validity period of their		
VALIDITY	bid, at the same terms and conditions, if the internal evaluation process has not been		
PERIOD	finalised within the validity period. However, once the adjudication body has approved the process and award of the business to the successful bidder(s), the validity of the		
	successful bidder(s)' bid will be deemed to remain valid until a final contract has been		
	concluded.		
ESTIMATED	oorloaded.		
APPOINTMEN	Monday, 31 January 2022		
T DATE	monday, or surdary 2022		
ESTIMATED			
CONTRACT	Five (5) years (including support, warranty and maintenance)		
DURATION (IN			

MONTHS/YEA	
RS)	

Any additional information or clarification will be emailed to all Respondents, if necessary.

Responses to this Request for Proposal (RFP) (hereinafter referred to as a Bid or a Proposal) are requested from suitably qualified entities (hereinafter referred to as a Respondent or Bidder) for the supply of a High Performance Computing Platform to the CSIR.

2 BACKGROUND & INVITATION FOR PROPOSAL

Proposals are hereby invited for the bidders to propose to the CSIR, a high performance computing (HPC) system to support the rapidly increasing computational demands of the entire spectrum of South Africa's computational research. The system needs to provide significant computational capabilities, with a target performance of 4Pflops sustained Linpack performance to deliver on the mandate of the CSIR. The Center envisage to increase the computing capability to at least 10 PFLOP within the next 5 years which will be based on the required 4 PFLOP system. Hence proposed technologies should be able to be valid for upgrades within the given time frame.

The current CHPC system named Lengau was implemented in phased approached with the first phase implementation in 2015 and the 2nd phase in 2016, with total peak performance of 1Pflop. CHPC supports over 1500 users and more than 100 applications across a broad range of science disciplines from Chemistry, Material Science, Astrophysics, Climate Science, Bioinformatics and more. Since the launch of Lengau in June 2015, the service has provisioned in excess of 6M jobs and the service is routinely at more than 93% utilisation, based on a quarterly accounting period.

The Centre's Advanced Computer Engineering Laboratory (ACE Lab), which is aimed at providing testing of new technologies has developed partnership with various OEMs in early access of bleeding-edge technologies, for testing purpose and providing advice for future production HPC systems within the centre. It is envisaged that through collaboration the laboratory will play a leading role in positioning South Africa in multinational Research and Development initiatives in high performance computing. CHPC is thus anticipating similar value-adding proposal of partnerships with the suppliers in this regard, which could include but not limited to co-development of the technologies, human capital development and technology access and testing.

3 IMPORTANT PROJECT REQUIREMENTS

The goal of this project is to provide a high performance computing system and services, which can support and provide real value to South Africa's research community now and into the future. The HPC arena is dynamic with many subtle technological opportunities and challenges. The CHPC therefore expects to be able to leverage the knowledge and experience of the successful Bidder in order to obtain the best solution to fulfil its needs. To this end the centre wishes to ensure that the potential Bidder is fully aware of the following:

- The centre places significant emphasis on providing a high quality, high performance computing service for its research community.
- The centre has a diverse and growing user base with skills ranging from expert to novice and
 a mixture of experience from laptop to midrange facilities at the respective South African
 Higher Education Institutions and Research councils. It is important that the overall solution
 engages and enables at all levels.
- The centre will work closely with the selected Bidder over the lifetime of the project not just over the course of the tender process. This will include co-development of new technologies and services that can improve the HPC experience of the User Community.
- It should further be noted that the proposed system must be able to integrate with some of the components of Lengau as per the technical requirements Annexure A. This integration is very important, as it will complete the operation of the proposed solution.
- The centre will also consider lease option that is available from Bidders as well as the
 upfront purchase option. The Bidders must include both or either of the options in their offer.
 The 5 year financial model for the lease/rental option must be included separately. CHPC
 will evaluate the two options and determine the best possible option to pursue
- Though the Bidders are requested to propose a HPC configuration that could reach a 4 Petaflop capacity, Bidders should be aware that the centre aspire to build a 10 Petaflop HPC system over a 5 year period. The Bidder must give a roadmap to 10PFlops, which will be based on the base system for the 4 PFLOP proposed and future processing unit technologies. These will be indicative roadmap and possible technology refreshers in the case where a leasing option is preferred. For an outright purchase the roadmap should assist in determining when phased upgrades can be planned.

4 FORMAL BRIEFING

An online compulsory RFP briefing session <u>will be held</u>, Friday, 19 November 2021, Time: 12:00 -14:00 but should respondents have specific queries they should email these to <u>tender@csir.co.za</u> with the RFP number **3492/10/12/2021** and the description of the RFP as the subject on your mail.

The Bidders are welcome to visit the Datacentre at Rosebank Campus, 15 Lower Hope Road, Cape Town should there be a need for data centre inspection. The non-compulsory inspection is scheduled for Monday, 22 November - Wednesday, 24 November 2021 from 10:00 – 17:00. Interested parties can send emails to dthobye@csir.co.za for the slots to be booked.

5 SOURCE DOCUMENTS

All Bidders must submit documents containing the following information together with documentary proof:

- Subcontracting and/or joint venture (where applicable);
- Bidders are required to submit a SBD1 Form) as per Annexure "D"
- B-BBEE Certificate (if applicable) and/or Sworn Affidavit; and
- Registration of the applicant on the Central Supplier Database (CSD) website (https://secure.csd.gov.za/) (where applicable).

6 SUBMISSION INSTRUCTIONS FOR THE TENDER

6.1 Proposals must be submitted to tender@csir.co.za as follows:

DESCRIPTION: RFP FOR THE SUPPLY OF A HIGH PERFORMANCE COMPUTING PLATFORM TO THE CSIR

- **6.2** Unless otherwise expressly stated, all Proposals furnished pursuant to this RFP shall be deemed to be offers. Any exceptions to this statement must be clearly and specifically indicated.
- **6.3** All proposals must be submitted at: tender@csir.co.za
- 6.3.1 All proposals are to be clearly marked with the RFP number under the subject on each e-mail submission;
- 6.3.2 Proposals must consist of two parts, each of which is submitted in a separate e-mail package clearly marked with the RFP Number and the description of the tender;
- 6.3.3 The detail requirements for each link are provided in the technical requirements document;

- 6.4 Proposals submitted by companies must be signed by a person or persons duly authorised; and
- **6.5** 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.

7 MEDIUM OF COMMUNICATION

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

8 GENERAL SUPPLIER OBLIGATIONS

- The Bidder(s) shall be fully responsible to CSIR for the acts and omissions of persons directly or indirectly employed by them.
- The Bidder(s) must comply with the requirements stated in this RFP.

9 B-BBEE AND SOCIO-ECONOMIC OBLIGATIONS

As explained in more detail in the Broad-Based Black Economic Empowerment (B-BBEE) Preference Points Claim Form (Annexure E), and as prescribed in terms of the Preferential Procurement Policy Framework Act (PPPFA), Act 5 of 2000 and its Regulations, Respondents are to note that CSIR will award preference points to companies who provide valid proof of their B-BBEE status using either the latest version of the generic Codes of Good Practice or Sector Specific Codes (if applicable).

The value of this bid is estimated to be over **R50 000 000** (all applicable taxes included); and therefore the **90/10** system shall be applicable. Despite the stipulated preference point system, CSIR shall use the lowest acceptable bid to determine the applicable preference point system in a situation where all received acceptable bids are received outside the stated preference point system.

Respondents are required to complete (the B-BBEE Preference Point Claim Form – Annexure E) and submit it together with valid proof of their B-BBEE Status as stipulated in the Claim Form in order to obtain preference points for their B-BBEE status. Respondents are required at all times to comply with the latest B-BBEE legislation and/or instruction notes as issued from time to time by the DTI.

Note: Failure to submit valid and original (or a certified copy of) proof of the Respondent's compliance with the B-BBEE requirements stipulated in this RFP (the B-BBEE Preference Points Claim Form) at the Closing Date of this RFP, will result in a score of zero being allocated for B-BBEE.

9.1 B-BBEE Joint Ventures or Consortiums

Respondents who would wish to respond to this RFP as a Joint Venture (JV) or consortium with B-BBEE entities, must state their intention to do so in their RFP submission. Such Respondents must also submit a signed JV or consortium agreement between the parties clearly stating the percentage (%) split of business and the associated responsibilities of each party. If such a JV or consortium agreement is unavailable, the partners must submit confirmation in writing of their intention to enter into a JV or consortium agreement should they be awarded business by CSIR through this RFP process. This written confirmation must clearly indicate the percentage (%) split of business and the responsibilities of each party. In such cases, award of business will only take place once a signed copy of a JV or consortium agreement is submitted to CSIR.

Respondents are to note the requirements for B-BBEE compliance of JVs or consortiums as required by the B-BBEE Preference Point Claim Form and submit it together with proof of their B-BBEE Status as stipulated in the Claim Form in order to obtain preference points for their B-BBEE status.

Respondents must also submit proof of ownership / shareholder certificates / copies and company registration certificates for each member.

Note: Failure to submit a valid and original B-BBEE certificate for the JV or a certified copy thereof at the Closing Date of this RFP will result in a score of zero being allocated for B-BBEE.

9.2 Subcontracting

CSIR fully endorses Government's transformation and empowerment objectives and when contemplating subcontracting Respondents are requested to give preference to Exempted Micro Enterprises (EMEs), Start-up companies and Qualifying Small Enterprises (QSEs) which are Black Owned, Black Women Owned, Black Youth Owned, companies owned by Black People with Disabilities, including any companies designated as B-BBEE Facilitators. ¹

Respondents are required to submit proof of the subcontracting arrangement between themselves and the subcontractor. Proof of the subcontracting arrangement may include a subcontracting agreement.

¹ The Minister of the Department of Trade and Industry has the power to designate certain Organs of State or Public Entities as B-BBEE Facilitators. For example, the South African National Military Veterans' Association (SANMVA) has been designated as a B-BBEE Facilitator. As such they will be treated as having rights of ownership held 100% by Black People, 40% by Black Women and 20% by Black designated groups.

Respondents are to note that it is their responsibility to select competent subcontractors that meet all requirements of the bid so that their bid is not jeopardised by the subcontractor when evaluated. Respondents are responsible for all due diligence on their subcontractors. If contemplating subcontracting, please note that a Respondent will not be awarded points for B-BBEE if it is indicated in its Proposal that such Respondent intends subcontracting more than 25% (twenty-five percent) of the value of the contract to an entity/entities that do not qualify for at least the same points that the Respondent qualifies for, unless the intended subcontractor is an EME with the capability to execute the contract.

Respondent/s are discouraged from subcontracting with their subsidiary companies as this may be interpreted as subcontracting with themselves and / or using their subsidiaries for fronting. Where a Respondent intends to subcontract with their subsidiary this must be declared in their bid response.

The successful Respondent awarded the contract may only enter into a subcontracting arrangement with CSIR's prior approval.

The contract will be concluded between the successful Respondent and CSIR, therefore, the successful Respondent and not the sub-contractor will be held liable for performance in terms of its contractual obligations.

The organisation awarded a contract may not subcontract more than 25% (twenty-five percent) 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 subcontracted to an EME that has the capability and ability to execute the subcontract.

In terms of this RFP (the B-BBEE Preference Point Claim Form – Annexure E) Respondents are required to indicate the percentage of the contract that will be sub-contracted as well as the B-BBEE status of the sub-contractor/s.

10 COMMUNICATION

 For specific queries relating to this RFP, an RFP Clarification Request Form (Annexure F) should be submitted to <u>tender@csir.co.za</u> before 16:30 on <u>Friday</u>, <u>26/11/2021</u> substantially in the form set out in Annexure F hereto, RFP Clarification Request Form.

Note: Respondents are warned that a Proposal will be liable to disqualification should any attempt be made by a Respondent either directly or indirectly to canvass any officer or employee of CSIR CSIR RFP No. 3492/10/12/2021 Page **11** of **23**

in respect of this RFP between the closing date and the date of the award of the business. Furthermore, Respondents found to be in collusion with one another will be automatically disqualified and restricted from doing business with CSIR in the future.

11 CONFIDENTIALITY

All information related to this RFP is to be treated with strict confidence. In this regard, Respondents are required to certify that they have acquainted themselves with the Non-Disclosure Agreement (Annexure G). All information related to a subsequent contract, both during and after completion thereof, will be treated with strict confidence. Should the need however arise to divulge any information gleaned from provision of the Services, which is either directly or indirectly related to CSIR's business, written approval to divulge such information must be obtained from CSIR.

12 INSTRUCTIONS FOR COMPLETING THE RFP

- All proposals be submitted online to <u>tender@csir.co.za</u>
- The proposed technical solution and pricing information must be submitted on separate folders.
- An electronic copy of the RFP Proposal must be submitted in MS Word / Excel format, and scanned PDF versions. (Note that the signed version will be legally binding). If submissions exceed 25MB multiple emails can be submitted.
- The proposed technical solution and the pricing information must be submitted separately.
- All returnable documents tabled in the Proposal Form (Annexure H Proposal Form and List of Returnable Documents) must be returned with proposals.
- Unless otherwise expressly stated, all Proposals furnished pursuant to this RFP shall be deemed to be offers. Any exceptions to this statement must be clearly and specifically indicated.
- Any additional conditions must be embodied in an accompanying letter. Alterations, additions, or deletions must not be made by the Respondent to the actual RFP documents.

13 COMPLIANCE

The successful Respondent (hereinafter referred to as the Service Provider) shall be in full and complete compliance with any and all applicable laws and regulations.

14 DISCLAIMERS

Respondents are hereby advised that CSIR is not committed to any course of action as a result of its issuance of this RFP and/or its receipt of Proposals. In particular, please note that CSIR reserves the right to:

- modify the RFP's Goods and/or services and request Respondents to re-bid on any such changes;
- reject any Proposal/goods/components/parts which do not conform to instructions and specifications which are detailed herein;
- disqualify Proposals submitted after the stated submission deadline [closing date];
- cancel the bid process;
- validate any information submitted by Respondents in response to this bid. This would include, but is not limited to, requesting the Respondents to provide supporting evidence. By submitting a bid, Respondents hereby irrevocably grant the necessary consent to CSIR to do so;
- not accept any changes or purported changes by the Respondent to the bid rates and/or specification after the closing date and/or after the award of the business, unless the CSIR specifically provided for it;
- disqualify bidders if National Treasury has placed the Respondent on its Database of Restricted Bidders, on the basis that a contract was awarded on the strength of incorrect information furnished by the Respondent;
- call for goods and/or services that are an exact equivalent, and the onus resides with the Bidder to prove such;
- modify any of its scope/drawings/specifications and the onus resides with the Bidder to ensure that the latest version is obtained before a sample is called upon for testing;
- visit the bidder's premises. The Respondents must be willing to allow access to CSIR to inspect and test the products to be approved in the Respondent's premises;
- award a contract for only a portion of the proposed Goods and/or services which are reflected in the scope of this RFP:
- split the award of the contract between more than one Service Provider (whether or not they submitted a joint proposal), should it at CSIR's discretion be more advantageous in terms of, amongst others, cost or developmental considerations;
- request audited financial statements or other documentation for the purposes of a due diligence exercise; and/or
- make no award of a contract.

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.

Should a bidder be awarded a contract and/or a purchase order be issued and/or a contract awarded on the strength of information furnished by the Respondent, which after conclusion of the contract, is proven to have been incorrect, CSIR reserves the right to cancel the contract and/or place the Respondent on CSIR's list of Restricted Bidders.

CSIR reserves the right to undertake post-tender negotiations (PTN) with selected Respondents or any number of short-listed Respondents, such PTN to include, at CSIR's option, price negotiations and any evaluation criteria listed in this RFP document. In the event of any Respondent being notified of such short-listed/preferred bidder status, his bid, as well as any subsequent negotiated best and final offers (BAFO), will automatically be deemed to remain valid during the negotiation period and until the ultimate award of business.

Should the preferred bidder fail to sign or commence with the contract within a reasonable period after being requested to do so, CSIR reserves the right to award the business to the next ranked bidder, provided that he/she is still prepared to provide the required goods at the quoted price. Under such circumstances, the validity of the bids of the next ranked bidder(s) will be deemed to remain valid. Bidders may therefore be requested to advise whether they would still be prepared to provide the required goods at their quoted price.

Kindly note that CSIR will not reimburse any Respondent for any preparatory costs or other work performed in connection with its Proposal, whether or not the Respondent is awarded a contract. 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.

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.

15 LEGAL REVIEW

A Proposal submitted by a Respondent will be subjected to review prior to consideration for an award of business. A material deviation could result in disqualification.

16 NATIONAL TREASURY'S CENTRAL SUPPLIER DATABASE

Respondents are required to self-register on National Treasury's Central Supplier Database (CSD), which has been established to centrally administer bidder information for all organs of state and facilitate the verification of certain key bidder information. Respondents must register on the CSD prior to submitting their bids. Business may not be awarded to a Respondent who has failed to register on the CSD. Only foreign bidder with no local registered entity need not register on the CSD.

17 PROTECTION OF PERSONAL DATA

In responding to this bid, CSIR acknowledges that it may obtain and have access to personal data of the Respondents. CSIR agrees that it shall only process the information disclosed by Respondents in their response to this bid for the purpose of evaluating and subsequent award of business and in accordance with any applicable law. Furthermore, CSIR will not otherwise modify, amend or alter any personal data submitted by Respondents or disclose or permit the disclosure of any personal data to any Third Party without the prior written consent from the Respondents. Similarly, CSIR requires Respondents to process any personal information disclosed by CSIR in the bidding process in the same manner.

CSIR urges its clients, bidders and the general public to report any fraud or corruption to The CSIR Ethics Hotline: 0800 222 584 which operates 24 hours a day, 7 days a week, 365 days per year.

SECTION B: FUNCTIONAL OVERVIEW

18 SCOPE OF REQUIREMENTS

The CSIR Scope of Requirements and/or Specification is as stipulated in **Annexure A** - Proposal Specification.

SECTION C: EVALUATION METHODOLOGY / PROCESS

19 PRE-QUALIFICATION CRITERIA TO ADVANCE CERTAIN GROUPS

- **19.1** A certified copy or an original copy of a valid B-BBEE certificate, or valid sworn affidavit must be submitted.
- **19.2** Bidders that failed to meet the pre-qualification requirements of this tender will not be considered.

20 ELIMINATION CRITERIA PHASE1

Proposals will be eliminated under the following conditions:

- 20.1 Submission after the deadline; and
- 20.2 Proposals submitted at incorrect email address. Please submit electronically to tender@csir.co.za, (Please use RFP Number as subject reference, if tenders exceed 25MB multiple emails can be submitted).

21 ELIMINATION CRITERIA PHASE2

Proposals will be eliminated under the following conditions:

- 21.1 The bidder does not have previous experience of deploying HPC system of Petascale system in South Africa with demonstration of local skills to provide 2nd Level support of such a system;
- **21.2** Solution cannot fit in the designated area;
- 21.3 Cooling requirements are not compatible with the existing water cooling system;
- **21.4** A compute node has less than 2GiB RAM core;
- 21.5 A compute node does not have at least 8 memory channels per socket;
- **21.6** The solution is not based on x86-64 processors:
- 21.7 Number of login nodes is less than 2;
- **21.8** Login servers contain processors with a different micro-architecture to the compute node's processors;
- 21.9 The total Interconnect bandwidth per node is less than 100 Gb/s from one HCA;
- **21.10** The operating system is not binary compatible with RHEL 8;

- 21.11 Number of DTN nodes is less than 2;
- **21.12** Number of Visualisation nodes is less than 4;
- 21.13 There is no MSlogin server;
- **21.14** There is no MEDEA server;
- 21.15 The solution does not include cluster management software and its servers;
- **21.16** The bidder does not have a comprehensive supply and service agreement with the OEM for HPC technology;
- 21.17 Solution does not provide comprehensive integration plan for the existing 3PB Lustre filesystem;
- 21.18 The solution does not include a backup solution for the NFS filesystem; and
- 21.19 If proposals do not achieve an average of 70% overall and 50% on each functional criteria as indicated in Annexure B.

22 PRICING PROPOSAL

- **22.1** The pricing proposal should include both or either of the two options, upfront and/or leasing.
- 22.2 The pricing proposal must include the initial lease period of 5 years with the option to renew based on the CSIR requirements.
- 22.3 The pricing for upfront purchase must show a price for the BASE system i.e. the 4PFLOP and a unit price for a PFLOP, as per Annexure C.
- 22.4 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.
- 22.5 Price needs to be provided in South African Rand (excl. VAT) and (Inc VAT) where applicable, with details on price elements that are subject to escalation and exchange rate fluctuations clearly indicated.
- **22.6** Price should include additional cost elements such as freight, insurance until acceptance, duty where applicable. 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

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

22.8 The Bidders must provide their latest Audited Annual Financial Statement which together with the consideration of financial risks may be used as objective criteria during the evaluation process.

Additional requirements

22.9 Clearly indicate VAT charged where applicable (if not VAT registered please state so clearly).

23 FUNCTIONAL EVALUATION CRITERIA

- 23.1 The evaluation of the functional/technical detail of the proposal will be based on the following criteria. Please refer to Annexure B for functional evaluation criteria
- 23.2 Proposals with functionality / technical points of less than the pre-determined minimum overall percentage of 70% and that do not achieve 50% on each functional criteria as indicated in Annexure B will be eliminated from evaluation.

24 EVALUATION METHODOLOGY

CSIR will utilise the following methodology and criteria.

Tender Evaluation Methodology

Step 1	Step 2	Step 3	Step 4	Step 5	Step 6
Administrative	Substantive	Adherence	Weighted	Post tender	Negotiation of
Responsiveness	Responsiveness	to	Scoring	negotiation	final terms &
		Specification		(as applicable)	conditions (if
		requirements		requesting best	applicable)
				& final offer,	
			Price /TCO B-BBEE	price, B-BBEE,	
			D-DDEE	lead times,	
				technical	
				aspects, etc.	
BID LODGED ON TIME, RETURNABLE DOCUMENTS	RETURNABLE DOCUMENTS & SCHEDULES (As stated in Annexure H of this RFP)	TECHNICAL	WEIGHTED SCORE	POST TENDER NEGOTIATION	AWARD OF CONTRACT

NB: Evaluation of the various stages will normally take place in a sequential manner. However, in order to expedite the process, CSIR reserves the right to conduct the different stages of the evaluation process in parallel. In such instances the evaluation of bidders at any given stage must not be interpreted to mean that bidders have necessarily passed any previous stage(s).

CSIR criteria, and the process will be indicated to the bidder/applicant during communication to submit samples and/or relevant information.

24.1 STEP ONE: Test for Administrative Responsiveness

The test for administrative responsiveness will include the following:

Administrative responsiveness check	RFP Reference
Whether the Bid has been lodged on time	Section A

The test for administrative responsiveness [Step One] must be passed for a Respondent's Proposal to progress to Step Two for further evaluation

24.2 STEP TWO: Check for substantive responsiveness

Check for substantive responsiveness	RFP REFERENCE
Whether the mandatory returnable documents have been submitted	All applicable sections of this RFP
Elimination Criteria (as applicable)	All applicable sections of this RFP

24.3 STEP THREE: Technical Evaluation

Technical Evaluation Criteria	RFP REFERENCE
 Technical evaluation 	All applicable sections of this RFP

24.4 STEP FOUR: PRICE & B-BBEE

Price a	nd B-BBEE	RFP REFERENCE
• Pr	ice and B-BBEE	All applicable sections of this RFP

24.5 POST TENDER NEGOTIATION

i. Post tender negotiation (as applicable) with shortlisted bidder/s including requesting best
 & final offer, price, B-BBEE, lead times, technical aspects, etc.

24.6 AWARD

ii. Award and/or signing of contract and issuing of Purchase Order/s to the successful Bidder/s

25 ORIGINAL EQUIPMENT MANUFACTURERS (OEMs)

The Respondents must complete **Annexure J** stating the actual manufacturers off all items tendered on.

• If the Bidder is not the manufacturer, it is a requirement to obtain and submit a valid confirmation letter (on the letterhead of the manufacturer) clearly stipulating consent and/or the agreement between the two parties.

26 RISK

Respondents must elaborate on the control measures put in place by their entity, which would mitigate the risk to CSIR pertaining to potential non-performance by a Bidder, in relation to the quality and specifications of items delivered and compliance to Occupational Health and Safety Act and ISO standards. Annexure K must be completed in full and submitted as part of the returnable documents.

27 SBD 9 CERTIFICATE OF INDEPENDENT BID DETERMINATION

- 27.1 Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging). Collusive bidding is a per se prohibition meaning that it cannot be justified under any grounds. Bid rigging (or collusive bidding) occurs when businesses, that would otherwise be expected to compete, secretly conspire to raise prices or lower the quality of goods and / or services for purchasers who wish to acquire goods and / or services through a bidding process. Bid rigging is, therefore, an agreement between competitors not to compete.
- **27.2** CSIR will take all reasonable steps to prevent abuse of the supply chain management system and to:
 - a. disregard the bid of any bidder if that bidder, or any of its directors have abused the institution's supply chain management system and or committed fraud or any other improper conduct in relation to such system.
 - cancel a contract and/or purchase order awarded to a bidder of goods and services if the bidder committed any corrupt or fraudulent act during the bidding process or the execution of that contract.
- **27.3** This serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid-rigging.
- 27.4 In order to give effect to the above, the following certificate of Bid Determination (SBD 9) must be completed and submitted with the bid, together with the Declaration By Tenderer And Breach Of Law Form attached as **Annexure** "I":

28 CERTIFICATE OF INDEPENDENT BID DETERMINATION

All respondents must complete the independent bid determination form and return as part of the returnable documents. See **Annexure L**.

29 TENDER RESPONSE DOCUMENTS

Tender documents must be submitted in two parts as listed below. No pricing information should be included in part 1 of the submission.

RFP Section	Tender Response Documents
	Technical Proposal and all relevant supporting documents on the technical proposal.
	Project management plan and related information
	References related information
	All relevant supporting documents on the technical proposal.
Part 1	Any other technical information the bidder wishes to share as part of the technical submission. This information must not contain any pricing information (Part 2).
	All returnable documents as stipulated in Annexure H
	Completed Annexure(s) (if any)
	B-BBEE certificate (SANAS) approved or Sworn Affidavit (in Dti format)
	Company profile
	Price schedule spreadsheet and official quotation on the company letterhead.
	CSD registration (www.csd.gov.za)
Part 2	Financial statements
T dit 2	This information must not contain any technical information i.e. Part 1 information.

30 ADDITIONAL TERMS AND CONDITIONS

- 30.1 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.
- **30.2** Copies of any affiliations, memberships and/or accreditations that support your submission must be included in the tender.
- **30.3** An omission to disclose material information, a factual inaccuracy, and/or misrepresentation of fact may result in the disqualification of a tender, or cancellation of any subsequent contract.
- 30.4 Failure to comply with any of the terms and conditions as set out in this document will invalidate the Proposal.

Engagement of Consultants

- **30.5** The consultants will only be remunerated at the rates:
 - 30.5.1 Determined in the "Guideline for fees", issued by the South African Institute of Chartered Accountants (SAICA); or
 - 30.5.2 Set out in the "Guide on Hourly Fee Rates for Consultants", by the Department of Public Service and Administration (DPSA); or
 - 30.5.3 Prescribed by the body regulating the profession of the consultant.

Travel Expenses

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

Correctness of Responses

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

Appointment of Service Provider

- **30.11** 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.
- 30.12 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 an agreement CSIR reserves the right to appoint an alternative bidder.

- **30.13** Awarding of contracts will be announced on the National Treasury website and no regret letters will be sent to unsuccessful bidders.
- **30.14** Proposals submitted by companies must be signed by a person or persons duly authorised.
- 30.15 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.