



Request for Proposals (RFP)

The supply, delivery and commissioning of Parallel File System Storage Hardware, and Software, and Maintenance and Support to the CSIR for a five (5) year period.

RFP No. 3671/04/02/2025

CSIR Response to Final enquiries/clarifications

#	Bidder's Question	CSIR Response
1	We request clarity on the following to achieve the requested 4, 7 and 10 PB capacity points, does CHPC expect the use of data reduction technologies such as compression? If so, does CHCP know how compressible typical data sets may be?	There is a very high degree of variability in compressibility of scientific data sets, and most of the largest data sets will be in NetCDF or HDF5 formats, which are already highly compressed. The capacity points must correspond with what will be reported by Unix "df" and "du" commands. Deduplication techniques may be used, but should not be evident to the user.
2	Page35 Annexure D The proposed Parallel File System must have a Peak read performance of 200GBps. The proposed Parallel File System must have a Peak write performance of 200GBps. Question: Is the performance requirement the same for 4 PB, 7 PB, and 10 PB capacity?	Yes.
3	Page32 3.1.6.2. Question: can we supply 380v 3-phase PDU's ?	Refer to RFP No. 3671-04-02-2025 - POWER AND SYSTEM INFORMATION
4	Page32 3.1.6.2. Question: Can we supply the below PDU connector ? (3-phase, 32 amp caravan plug)	Refer to RFP No. 3671-04-02-2025 - POWER AND SYSTEM INFORMATION
5	Page32 Question: 3.1.6.2. 3-phase smart PDUs in High Availability mode. question: is the phase voltage mentioned equal to 380v ?	Refer to RFP No. 3671-04-02-2025 - POWER AND SYSTEM INFORMATION
6	Page32 Question: 3.1.6.2. 3-phase smart PDUs in High Availability mode. question: is the input voltage equal to 3-phase 380v or is it standard SA line voltage 220v?	Refer to RFP No. 3671-04-02-2025 - POWER AND SYSTEM INFORMATION

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7	<p>The performance requirements in the document for read and write of 200GBps is stated as Sustained in Annexure C Section 3. However, in Annexure D the Table reflects Peak performance.</p> <p>Please could CHPC clarify what the hardware sizing should be focussed on Peak or Sustained?</p>	The requirement for 200 GBps is for peak conditions.																																												
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9	<p>What are the envisaged deployment dates or when would the cut-off be from an installation date?</p>	Delivery of the equipment must be six (6) to eight (8) from the date of receiving on official CSIR purchase order.																																												
10	<p>Annexure C: Section 3.1.1.5 Performance Specification:</p> <p>Minimum Ingest per day assuming an 8 Hour day is ~1.7GB/s this does not line up with the Minimum Sustained Read and Write Performance of 200GB/s requirement. Please clarify?</p>	The requirement for 200 GBps is for peak conditions.																																												
11	<p>How many Kilowatts (kW) are available to each rack?</p>	Refer to RFP No. 3671-04-02-2025 - POWER AND SYSTEM INFORMATION																																												
12	<p>Can the Bidder use the OEM (Lenovo) to do the commissioning and,maintenance and support</p> <p>3.1.13. Bidder's Experience</p> <p>Bidder(s) to complete the information requested below and provide a minimum of three (3) contactable references where a similar scope to supply, delivery and commission Parallel File System Storage hardware; software maintenance and support was undertaken.</p> <table border="1"> <thead> <tr> <th>Client, contact person and telephone number, where available</th> <th>Description of work (service)</th> <th>Value of work (the service provided) inclusive of VAT (ZAR)</th> <th>Date completed</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	Client, contact person and telephone number, where available	Description of work (service)	Value of work (the service provided) inclusive of VAT (ZAR)	Date completed																																									Small business enterprises can partner with OEMs
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13	To achieve the requested 4, 7 and 10 PB capacity points, does CHPC expect the use of data reduction technologies such as compression? If so, does CHCP know how compressible typical data sets may be?	The 4 PB, 7 PB, and 10 PB capacity points should be achieved without reliance on data reduction technologies such as compression or deduplication. The storage solution must provide the specified raw capacity to ensure it can meet these targets, regardless of dataset compressibility or the use of data reduction
14	How far is the cabinet that we need to supply from the service cabinet?	Refer to Figure 2 in the RFP There are two (2) racks between the storage and service rack and rack dimensions are (800 X 1520 x 2012) (width x depth x height). A bidder will be required to install the system in the storage node rack.
15	Do the cable runs from the top or bottom in the data centre?	Cable runs from the top.
16	How many IB switches and ports per IB switch you have allocated or spare?	12 OSFP ports per switch. This translates to 24 x NDR ports per switch or 48 x NDR200 ports per switch.
17	What is the form factor and speed for in-band management network?	Rj45 10GbE
18	Sustained read and write a true 200G/s or must the solution only support 200G/s connection?	The requirement for 200 GBps is for peak conditions.
19	Do I supply the IB switches?	Bidders must propose working solution with all necessary equipment required for their solution
20	Do I supply in band switches?	bidders must propose working solution with all necessary equipment required for their solution
21	Are we able to do the benchmarking on a smaller cluster?	Yes, with the necessary motivation to support the claim that this is representative of a larger system.
22	With reference to the bidders Question #5 for the SMMEs to have a minimum of 3 contactable references. CSIR answer reference to the following:	Small business enterprises can partner with OEMs

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	<p>"OEMs are allowed to participate in the tender if they have the required references where they have implemented a similar scope of work as per the Terms of Reference in Annexure C of the RFP document. "</p> <p>Question: Are we, as SMME, allowed to tender on this project with the OEMs? The above will assist us as SMMEs to have support from our OEMs.</p>	
23	<p><u>Background information</u> As an OEM, our policy is to respond to enterprise business tenders through our partners and not directly. We have responded to numerous South African national tenders like SITA, COCT, Western Cape Government, CSIR, GPG, Eskom, PRASA, SAPS, etc. The path to respond for those hardware tenders were through our partners as this is the typical route to respond. In those tenders the OEM references counted towards the requirements specified in the tender documents.</p> <p>From a technical perspective these tenders can be complexed with many variations involving numerous other components and possibly other companies , it is usually impossible to get references on all the different components involved.</p> <p>From a contribution to the development of small businesses, if references count from the bidding company only, it will exclude, isolate and stunt the growth of small business enterprises in South Africa and only allow the big businesses to qualify. It is our goal to assist with the growth of small business enterprises in South Africa and conform to the objectives as indicated by our president in the 2025 SONA address.</p> <p><i>State of the Nation Address (SONA) 2025, President Cyril Ramaphosa</i> <i>"For many decades our economy has been held back by the exclusion of the vast majority of the South African people. Black South Africans were deprived of land, of capital, of skills, of opportunities. Our economy was starved of the potential of its people. And that is why we need to transform our economy and make it more inclusive. That is why our focus is on empowering black people, women and persons with disabilities because they were deliberately excluded from playing a key role in the economy of their own country."</i> <i>"We will fast-track the regulations of the Public Procurement Act to ensure businesses owned by women, youth and persons with disabilities receive equitable opportunities in government contracts."</i></p> <p><u>In reference to:</u> RFP No. 3671-04-02-2025 RFP for Parallel File System Page33 3.1.7.4. Provide a minimum of 3 contactable references from clients who received similar solutions.</p>	<p>The bidders must provide a minimum of 3 contactable references from clients who received similar solutions as per section 3.1.7.4 of the RFP. The CSIR recommends that bidders must submit the required documents for references as per the technical evaluation in Annexure D.</p> <p>OEMs are allowed to participate in the tender if they have the required references where they have implemented a similar scope of work as per the Terms of Reference in Annexure C of the RFP document.</p> <p>Small business enterprises can partner with OEMs</p> <p>If there is a subcontracting agreement between the OEM and the small business enterprises, then it must be in line with the requirement of the RFP.</p>

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	<p>Question : will the OEM references count towards 3.1.7.4 or can it only be references from the bidder?</p>	
24	<p>Please see the response to Question 5 for clarity: Given the collaborative nature of our work with OEMs, and the restrictions on reseller references and OEM letters, providing three contactable client references for similar solutions, as requested in question 5, is difficult for many bidders. We request the option to use OEM customer references, as this will empower skilled partners and encourage collaboration with OEMs, ultimately driving innovation and the delivery of new and enhanced solutions.</p>	<p>The bidders must provide a minimum of 3 contactable references from clients who received similar solutions as per section 3.1.7.4 of the RFP. The CSIR recommends that bidders must submit the required documents for references as per the technical evaluation in Annexure D. OEMs are allowed to participate in the tender if they have the required references where they have implemented a similar scope of work as per the Terms of Reference in Annexure C of the RFP document.</p> <p>Small business enterprises can partner with OEMs</p>
25	<p>Herewith a question with regards to the RFP above mentioned on the subject CSIR states that OEM can participate in this tender as long as they have 3 references. Having states that, does that not exclude the SMME especially the upcoming black companies and black woman-owned companies that want to venture into the HPC space. Above all are you not systematically excludes us from participating on this RFP.</p>	<p>RFP is open to all suppliers in the market and has been advertised on the National Treasury platform.</p> <p>Small business enterprises can partner with OEMs</p>
26	<p>As per Annexure D, we would like to confirm the GBps refers to "Gigabytes per second" and not "Gigabits per second"?</p>	<p>(GBps) Gigabytes per second</p>
27	<p>I am writing to raise my concern regarding the participation of OEMs for RFP No.3671/04/02/2025 The Supply Delivery and Commissioning of Parallel File System Storage Hardware and Software and Maintenance and Support to the CSIR for a Five (5) Year Period tender. One of your requirements states that Black Women Owned companies are encouraged to participate on the tender as part of your preferential procurement however, I think that allowing OEMs to also take part put SMMEs at a disadvantage because we will not be able to compete with them on pricing since they are the original manufactures of the systems and the determine the price. So, as a Black Woman owned SMME it means CSIR is deviating from their requirement of preferential procurement. I would appreciate if CSIR can clarify this concern</p>	<p>RFP is open to all suppliers in the market and has been advertised on the National Treasury platform.</p> <p>Small business enterprises can partner with OEMs</p>