

**PROJECT: WINDOWS SERVER HYPERCONVERGE INFRASTRUCTURE (HCI)**

This amends Section VI Schedule of Requirements of the bidding document.

**From:**

The delivery schedule expressed as weeks/months stipulates hereafter a delivery date which is the date of delivery to the project site.

Item Number	Description	Quantity	Delivered, Weeks/Months
1.0	Supply, Delivery, and Installation into Operational State of a Hyperconverged Infrastructure (HCI) Hardware at the SSS Main Production Center (Site 1):		Within One Hundred Fifty (150) calendar days from receipt of Notice to Proceed and Signed Contract
	a. Server Nodes	At least five (5) nodes	
	b. Network Switches	Two (2) units	
	c. Rack Enclosure	One (1) unit	
2.0	Supply, Delivery, and Installation into Operational State of a Hyperconverged Infrastructure (HCI) Hardware at the SSS Disaster Recovery Site (Site 2):		
	a. Server Nodes	At least five (5) nodes	
	b. Network Switches	Two (2) units	
	c. Rack Enclosure	One (1) unit	
3.0	Documentation		
	a. Provision of detailed system diagram. The diagram shall be printed on high-quality paper, A2 or A3 size media.	Two (2) hard-copies and one (1) softcopy	
	b. Provision of detailed configuration and technical specifications	Two (2) hard-copies and one (1) softcopy)	
	c. Provision of Systems Operations Manual	Two (2) hard-copies and one (1) softcopy	
4.0	Training/Knowledge Transfer Requirements:		
	a. Installation, Configuration, System Administration & Management of proposed Hypervisor, which also includes Vir-		

	<p>tual Machines, Virtual Network Connectivity, migrations between different Hypervisors and different sites (local, cloud, hybrid), V2V (Virtual to Virtual) migrations of VMs from different sites (minimum of twenty-four (24) training hours).</p> <p>b. System Administration &amp; Management of HCI Resources (such as user accounts and resource optimizations), multi-node load balancing, active-passive and active-active methodologies of two or more data centers (minimum of sixteen (16) training hours).</p> <p>c. Training schedule shall be agreed upon by SSS and Winning Bidder during project implementation planning.</p> <p>d. The training venue, materials, and other logistics, including but not limited to meals and snacks for the participants, shall be the responsibility of the winning bidder.</p> <p>e. Internationally recognized Training Certificates must be provided to the participant at the end of the training session.</p> <p>f. All training sessions must be conducted in a laboratory/workshop environment for five (5) system administrators of the Hosting Services Department (HSD), SSS.</p> <p>g. The training laboratory/workshop must be equipped with a fully functional simulation of the proposed systems, including the following as listed below:</p> <ul style="list-style-type: none"> <li>• Six (6) physical HCI nodes (may not be the same as the proposed brand, model, and resource configurations), with each node installed with the proposed hypervisor</li> <li>• Four (4) network switches (may not be same as proposed TOR (Top of Rack) switches)</li> <li>• Five (5) laptops, installed with fully operational Windows 11 and fully networked to the HCI setup</li> </ul>	<p>Within One Hundred Fifty (150) calendar days from receipt of Notice to Proceed and Signed Contract</p>
<p>5.0</p>	<p>Provision of Project Management Services during the project implementation phase:</p> <p>a. Initial Meeting (Kickoff meeting) – to be conducted within 5 calendar days upon receipt of Notice to Proceed and Signed Contract.</p> <p>b. Project Implementation Planning Session/s - to be conducted within 15 calendar days after the kickoff meeting.</p> <p>c. Creation of Project Implementation Plan (PIP) – to be submitted within 5 calendar days after the 20-calendar period allocated for the Planning Session/s.</p>	

	<p>d. The supplier must assign a Project Manager (PM) to oversee the implementation of the project during the one-hundred fifty (150) calendar days project duration. The PM must be under the direct employment of the Supplier.</p> <p>e. SSS shall provide a template for the PIP document to the winning bidder during the kickoff meeting.</p>	
6.0	<p>One (1) Year Warranty</p> <p>See Section V – Special Conditions of the Contract, GCC Clause 5.1 for details.</p>	To commence immediately upon acceptance of the Windows Server HCI by the Hosting Services Department
7.0	<p>Five (5) Years Direct Manufacturer Warranty and Maintenance Services</p> <p>See Section V – Special Conditions of the Contract, GCC Clause 5.2 for details.</p>	To commence immediately upon expiry of the one (1) year Warranty Period

TO:

The delivery schedule expressed as weeks/months stipulates hereafter a delivery date which is the date of delivery to the project site.

Item Number	Description	Quantity	Delivered, Weeks/Months
1.0	Supply, Delivery, and Installation into Operational State of a Hyperconverged Infrastructure (HCI) Hardware at the SSS Main Production Center (Site 1):		
	a. Server Nodes	At least five (5) nodes	
	b. Network Switches	Two (2) units	
	c. Rack Enclosure	One (1) unit	
	d. External Storage	One (1) unit	
2.0	Supply, Delivery, and Installation into Operational State of a Hyperconverged Infrastructure (HCI) Hardware at the SSS Disaster Recovery Site (Site 2):		
	a. Server Nodes	At least five (5) nodes	
	b. Network Switches	Two (2) units	
	c. Rack Enclosure	One (1) unit	
	d. External Storage	One (1) unit	
3.0	Documentation		Within One Hundred Fifty (150)

	d. Provision of detailed system diagram. The diagram shall be printed on high-quality paper, A2 or A3 size media.	Two (2) hard-copies and one (1) softcopy	calendar days from receipt of Notice to Proceed and Signed Contract
	e. Provision of detailed configuration and technical specifications	Two (2) hard-copies and one (1) softcopy	
	f. Provision of Systems Operations Manual	Two (2) hard-copies and one (1) softcopy	
4.0	<p>Training/Knowledge Transfer Requirements:</p> <p>h. Installation, Configuration, System Administration &amp; Management of proposed Hypervisor, which also includes Virtual Machines, Virtual Network Connectivity, migrations between different Hypervisors and different sites (local, cloud, hybrid), V2V (Virtual to Virtual) migrations of VMs from different sites (minimum of twenty-four (24) training hours).</p> <p>i. System Administration &amp; Management of HCI Resources (such as user accounts and resource optimizations), multi-node load balancing, active-passive and active-active methodologies of two or more data centers (minimum of sixteen (16) training hours).</p> <p>j. Training schedule shall be agreed upon by SSS and Winning Bidder during project implementation planning.</p> <p>k. The training venue, materials, and other logistics, including but not limited to meals and snacks for the participants, shall be the responsibility of the winning bidder.</p> <p>l. Internationally recognized Training Certificates must be provided to the participant at the end of the training session.</p> <p>m. All training sessions must be conducted in a laboratory/workshop environment for five (5) system administrators of the Hosting Services Department (HSD), SSS.</p> <p>n. The training laboratory/workshop must be equipped with a fully functional simulation of the proposed systems, including the following as listed below:</p> <ul style="list-style-type: none"> <li>• Six (6) physical HCI nodes (may not be the same as the proposed brand, model, and resource configurations), with each node installed with the proposed hypervisor</li> <li>• Four (4) network switches (may not be same as proposed TOR (Top of Rack) switches)</li> </ul>		Within One Hundred Fifty (150) calendar days from receipt of

	<ul style="list-style-type: none"> <li>Five (5) laptops, installed with fully operational Windows 11 and fully networked to the HCI setup</li> </ul>	Notice to Proceed and Signed Contract
5.0	<p>Provision of Project Management Services during the project implementation phase:</p> <p>f. Initial Meeting (Kickoff meeting) – to be conducted within 5 calendar days upon receipt of Notice to Proceed and Signed Contract.</p> <p>g. Project Implementation Planning Session/s - to be conducted within 15 calendar days after the kickoff meeting.</p> <p>h. Creation of Project Implementation Plan (PIP) – to be submitted within 5 calendar days after the 20-calendar period allocated for the Planning Session/s.</p> <p>i. The supplier must assign a Project Manager (PM) to oversee the implementation of the project during the one-hundred fifty (150) calendar days project duration. The PM must be under the direct employment of the Supplier.</p> <p>j. SSS shall provide a template for the PIP document to the winning bidder during the kickoff meeting.</p>	
6.0	<p>One (1) Year Warranty</p> <p>See Section V – Special Conditions of the Contract, GCC Clause 5.1 for details.</p>	To commence immediately upon acceptance of the Windows Server HCI by the Hosting Services Department
7.0	<p>Five (5) Years Direct Manufacturer Warranty and Maintenance Services</p> <p>See Section V – Special Conditions of the Contract, GCC Clause 5.2 for details.</p>	To commence immediately upon expiry of the one (1) year Warranty Period

**QUERIES/CLARIFICATIONS RAISED DURING THE PRE-BID CONFERENCE:**

	<b>Query/Clarifications</b>	<b>TWG/BAC Reply</b>
1	For the Single Largest Completed Contract (SLCC), can we consider Converge Infrastructure Data Center?	No. We define the SLCC as Hyperconverge Infrastructure (HCI).
2	Regarding the Terms of Payment, we understand that it is a lumpsum or full payment after full acceptance. Can we have it relaxed into making it a progressive payment with payment milestone instead so that costs are lighter to bear?	<p>This amends Section V Special Conditions of the Contract Item 2.2 of the bidding document:</p> <p><u>From:</u></p> <p>Payment shall be as follows:</p> <ul style="list-style-type: none"> <li>• <b>For Windows Server HCI -</b> One-time payment upon issuance of certificate of project acceptance of HSD based on deliverables under Section VI (Schedule of Requirements).</li> <li>• <b>For the Five (5) Years Direct Manufacturer Warranty and Maintenance Services –</b> Quarterly basis upon submission of Quarterly Service Report and acceptance by HSD. Payment shall be credited to the LANDBANK or DBP or any choice of bank account subject to the applicable bank charges of the winning bidder.</li> </ul> <p>The payment shall be subject to retention of Withholding Tax and other applicable taxes in accordance with existing Laws and BIR Rules and Regulations, to be remitted directly to the BIR by the SSS.</p> <p>Payment using a Letter of Credit is not allowed.</p> <p>Retention Money equivalent to one percent (1%) of the total contract price shall be retained and shall only be released after the lapse of the</p>

		<p>five (5) years Direct Manufacturer Warranty period.</p> <p><u>To:</u></p> <p>Please see attached Annex "1"</p>
3	<p>Regarding the warranty and maintenance, I understand that the first-year warranty will commence after the final acceptance and the five-year manufacturer's warranty will immediately follow. Can we request that the first-year warranty should start right after the delivery? The reason for this is that during the implementation and deployment, the warranty might be needed. Can we have the 5-year warranty to be implemented first then after that the 1-year warranty should follow immediately?</p>	<p>Request is denied. We maintain our requirements.</p>
4	<p>Regarding item 2.1n, a single cluster can be expanded to a minimum of 1024 nodes, is there a possibility of lowering the requirements since no other brands can comply with this after conducting our due diligence?</p>	<p>We maintain our requirements.</p>
5	<p>Just to clarify on this requirement, 2.1n, does it mean that when this is expanded, the minimum node should be 1024?</p>	<p>The 1024 nodes are for future expansion since our existing HCI cannot be expanded anymore, hence, this procurement process. We would like to have an HCI that is capable of being upgraded in the future.</p>
6	<p>As indicated in item 1.4, there is a minimum of 920 T raw capacity of storage and the whole Section IV is yet another storage. I want to understand the logic why we need to have another storage when we already have one. It defeats the purpose of Hyperconvergence Infrastructure if we are to employ too large storage capacities.</p>	<p>SSS has a lot of data. As we speak, data is adding up continuously. Sometimes, when we do capacity planning, it gets overwhelmed considering the new programs being launched, calamities, all of which goes to our IT. We again conduct another review of our storage requirement and decided to add another storage as compared to the storage requirement during the first advertisement. Also, take note that we did not add this additional requirement to the ABC, and our previous bidders' bid were lower than.</p>
7	<p>On item 6.1, Requirement Certificate states that "The proposed HCI brand</p>	<p>No. We maintain our requirement.</p>

	<p>must be member/leader/member of DMTF (Distributed Management Task Force) and SNIA (Storage Networking Industry Association). The bidding vendor must provide related proof through official websites".</p> <p>On the first advertisement, the statement is "DMTF and or SNIA but right now, I noticed that the statement is "DMTF and SNIA".</p> <p>Will the BAC and the Technical Working Group be kind enough to consider reverting to the first advertisement and make it "DMTF and or SNIA?"</p>	<p>Based on our research, being a part of DMTF and SNIA is crucial for ensuring that the proposed solution/products meet industry standards, fostering innovation, and building credibility.</p>
8	<p>Under Section V- Special Conditions of Contract, Item 4a1, During Post-Quaification. "</p> <p>The bidder with the lowest calculated bid is required to provide a demonstration of the proposed Hyperconverged Infrastructure (HCI) Servers through onsite or online demonstration or may facilitate TWG visit to the Bidder's existing HCI installation within five (5) calendar days upon notice by BAC. The result of the demonstration/visit shall be used in the determination of the bidder's compliance with the minimum technical specification as indicated in Section VII of this PBD".</p> <p>The term "the minimum technical specification", does it mean that demonstration to be done has to be the exact the same specification that was offered during the actual bid, is this correct?</p>	<p>Yes</p>
9	<p>On the Technical Specifications under Item 2.2, concerning the current migration of different SSS applications, will you be providing the list of these apps that will be migrated? We want to check first its compatibility with our proposed solution before the actual migration.</p>	<p>No, we will not provide. Those applications are already installed in a Microsoft Window Server Environment. So, if we are going to migrate them, it should also be installed in the same environment.</p>
10	<p>Your windows environment might have a lower/older version and migrating those apps to a newer version of windows might pose incompatibility, which makes it our concern.</p>	<p>N/A</p>



**WRITTEN QUERIES:**

	<b>Query/Clarifications</b>	<b>TWG/BAC Reply</b>
1	<p>Technical Specification Section 2.1n - A single cluster can be expanded to a minimum of 1024 nodes.</p> <p>May we ask if this could be relaxed to a lower number of nodes for expansion? 1,024 seems to be the maximum for a specific server brand.</p>	<p>No. We maintain our requirements.</p>
2	<p>Technical Specification Section 6.1 - The proposed HCI brand must be a member/leader/member of DMTF (Distributed Management Task Force) and SNIA (Storage Networking Industry Association). The bidding vendor must provide related proof through official websites.</p> <p>May we request if we could provide DMTF and/or SNIA membership proof.</p>	<p>No. We maintain our requirement.</p> <p>Based on our research, being a part of DMTF and SNIA is crucial for ensuring that the proposed solution/products meet industry standards, fostering innovation, and building credibility.</p> <p>Based on our research, several HCI vendors are members of these organizations.</p>
3	<p>Technical Specification Section 2.0 Hyper-converged Software/ Hypervisor All Operating Systems (OS) (hypervisors and guest OSs) must be the current version/release by the OS manufacturer/s.</p> <p>Do you want us to propose Windows Server Data Center 2022 so SSS can use Windows Server 2022, 2019 and 2016 guest OS. Or do you want us to propose Windows Server 2025 so you can run 2025, 2022, 2019 but not 2016?</p>	<p>SSS HCI Project requires the current version/release by the OS manufacturer.</p>
4	<p>Special Conditions of Contract Section 4.0</p> <p>A. DURING POST-QUALIFICATION 1. The Bidder with the lowest calculated bid is required to provide a demonstration of the proposed Hyperconverged Infrastructure (HCI)</p>	

	<p>Servers through onsite or online demonstration or may facilitate TWG visit to the Bidder's existing HCI installation within five (5) calendar days upon notice by BAC. The result of the demonstration/visit shall be used in the determination of the bidder's compliance with the minimum technical specification as indicated in Section VII of this PBD.</p> <p>May we clarify that the specs in the Section VII Technical Specifications may not be the same as the specifications in the HCI demonstration? If yes, we can do a demonstration in any of our existing HCI installations.</p>	<p>No. We maintain our requirement.</p> <p>The purpose of the demonstration is to show the capabilities of the proposed hypervisor.</p>
5	<p>For Section V. Special Conditions of Contract, Item 4.A.1:</p> <p>Can we inquire if it is necessary to produce a demo unit with the minimum specification per indicated in Section VII? A cluster with that specification would equate to like a purchase of the requirement?</p>	<p>No. We maintain our requirement.</p> <p>The purpose of demonstration is to show the capabilities of the proposed hypervisor.</p>
6	<p>For Section VII. Technical Specifications, Item 2.1n, "A single cluster can be expanded to a minimum of 1024 nodes."</p> <p>Can this item be relaxed, as it only one brand can comply to this requirement, as per links below:</p> <p>Huawei FusionCube, 1024 nodes:  <a href="https://lorennetworks.com/wp-content/uploads/2023/04/FusionCube-1000-Hypervisor-Datasheet.pdf">https://lorennetworks.com/wp-content/uploads/2023/04/FusionCube-1000-Hypervisor-Datasheet.pdf</a></p> <p>H3C UIS, 256 nodes:  <a href="https://www.h3c.com/en/Products_and_Solutions/Cloud_AI/HCI/Products_With_Picture/HCI_Appliance/H3C UIS 3000 G5/">https://www.h3c.com/en/Products and Solutions/Cloud AI/HCI/Products With Picture/HCI Appliance/H3C UIS 3000 G5/</a></p> <p>HPE Simplivity, 96 nodes:  <a href="https://www.hpe.com/us/en/collaterals/collateral.a50011253enw.html">https://www.hpe.com/us/en/collaterals/collateral.a50011253enw.html</a></p>	<p>No. We maintain our requirement.</p> <p>We need an HCI system that can scale up to 1024 nodes as that kind of system provides superior benefits in terms of scalability, performance, fault tolerance, and simplified management, making it an ideal choice for large enterprises, like SSS, with growing, complex IT infrastructure requirements. And based on our research, there are multiple HCI vendors which can meet this requirement.</p>

	<p>Nutanix, 48 nodes:  <a href="https://portal.nutanix.com/page/documents/kbs/details?targetId=kA07V000000LaOYSA0">https://portal.nutanix.com/page/documents/kbs/details?targetId=kA07V000000LaOYSA0</a></p> <p>Sangfor HCI, 64 nodes:  <a href="https://community.sangfor.com/archiver/?tid-9419.html#:~:text=As%20of%20my%20last%20knowledge,products%20can%20change%20over%20time.">https://community.sangfor.com/archiver/?tid-9419.html#:~:text=As%20of%20my%20last%20knowledge,products%20can%20change%20over%20time.</a></p>	
7	<p>For Section VII. Technical Specifications, the whole item 4:</p> <p>Can we inquire if the capacity of the additional storage can be integrated to the storage of the HCI in Item 2? For HCI, a hybrid disk setup can be made and a storage pool can be created to still serve the All-Flash (SSD or NVMe) requirement of the HCI, and another storage pool to HDD for the additional storage.</p> <p>Integrating the additional capacity can save the cost of whole new storage system. Also, introducing an external storage defeats the purpose of HCI, which integrates compute, storage, network and security into a single solution.</p>	<p>No. We maintain our requirement.</p> <p>In the context of Hyper-Converged Infrastructure (HCI) solutions, external storage typically refers to a separate, dedicated storage system that is connected to the HCI environment.</p> <p>While HCI integrates compute, storage, and networking into a single platform, we still see the necessity or benefit to connect to external storage for some of our identified use cases.</p> <ul style="list-style-type: none"> <li>• Scalability: External storage can provide an additional layer of scalability for environments that require high-capacity storage beyond the native limits of the HCI solution. By adding external storage, you can scale storage capacity without being limited by the HCI appliance's internal storage capabilities. This allows us to expand our storage capacity without adding more compute resources. It also allows us to expand our compute nodes separately.</li> <li>• Cost-Effective Scaling: In certain cases, scaling storage externally can be more cost-effective than continuously expanding the internal storage of an HCI system. If SSS needs a large volume of storage but does not need all the compute resources, it can be cheaper to extend</li> </ul>

		storage externally rather than adding additional HCI nodes with storage capacity.
8	<p>For Section VII. Technical Specifications, the whole item 6.1:</p> <p>The re-advertisement has revised this item to DMFT and SNIA. Can we request it to be reverted as to original advertisement which states DMFT and/or SNIA?</p>	<p>No. We maintain our requirement.</p> <p>Based on our research, being a part of DMFT and SNIA is crucial for ensuring that the proposed solution/products meet industry standards, fostering innovation, and building credibility.</p> <p>Based on our research, several HCI vendors are members of these organizations.</p>
9	<p>May we request po for the "Terms of Payment", that instead payment to the winning bidder of the CAPEX portion be in whole only after the "Final Acceptance" of the project, it may be paid progressively based on key milestones? Perhaps you may consider: 1st payment – 30% upon installation into operational state of the HCI equipment at the SSS Main Production Center, 2nd payment 30% upon installation into operational state of the HCI equipment at the SSS Disaster Recovery Site, 3rd payment 30% upon successful conduct of Training/Knowledge Transfer, and 4th &amp; last payment 10% upon Final Acceptance.</p>	<p>This amends Section V Special Conditions of the Contract Item 2.2 of the bidding document:</p> <p><u>From:</u></p> <p>Payment shall be as follows:</p> <ul style="list-style-type: none"> <li>• <b>For Windows Server HCI -</b> One-time payment upon issuance of certificate of project acceptance of HSD based on deliverables under Section VI (Schedule of Requirements).</li> <li>• <b>For the Five (5) Years Direct Manufacturer Warranty and Maintenance Services –</b> Quarterly basis upon submission of Quarterly Service Report and acceptance by HSD. Payment shall be credited to the LANDBANK or DBP or any choice of bank account subject to the applicable bank charges of the winning bidder.</li> </ul> <p>The payment shall be subject to retention of Withholding Tax and other applicable taxes in accordance with existing Laws and BIR Rules and</p>

		<p>Regulations, to be remitted directly to the BIR by the SSS.</p> <p>Payment using a Letter of Credit is not allowed.</p> <p>Retention Money equivalent to one percent (1%) of the total contract price shall be retained and shall only be released after the lapse of the five (5) years Direct Manufacturer Warranty period.</p> <p><u>To:</u></p> <p>Please see attached Annex "1"</p>
10	<p>Regarding requirement for winning bidder to provide 1 year Warranty to commence upon Final acceptance, may we request that this 1<sup>st</sup> year warranty commence instead once the delivery and installation works of the equipment have commenced? Once final Acceptance has been issued, the Additional 5 years Maintenance/Warranty shall then immediately follow.</p>	<p>No. We maintain our requirement.</p>
11	<p>Item 1:</p> <p>1.1___ Is this a typical standalone server/nodes that will be used for the HCI solution?</p> <p>1.4___ there's no perpetual license anymore, might to consider subscription license.</p> <p>4.0___ External Storage: what will be used of the external storage since the project is already an HCI solution?</p>	<p>We are requiring the bidders to proposed rack mounted servers that are compliant to the proposed HCI platform.</p> <p>No. we maintain our requirements. Based on our research, there are several vendors that can provide perpetual licensing.</p> <p>In the context of Hyper-Converged Infrastructure (HCI) solutions, external storage typically refers to a separate, dedicated storage system that is connected to the HCI environment.</p> <p>Adding external storage to an HCI setup can significantly enhance SSS scalability, performance, and flexibility. This is relevant especially for SSS that has high storage requirements</p>

Unified Management platform:  
5.0\_\_\_ For the third party storage, switches (FC and IP Switches), and servers, may we have list or inventory of the said devices?

Request is denied. The information is confidential in nature and maybe provided only to the winning bidder.

May we know the existing Virtualization environment, current version, guest VM version and list of all VMs and its Operating System?

Request is denied. The information is confidential in nature and maybe provided only to the winning bidder.