

(TENDER REFERENCE: ELCSS-HO-IT-HW/2017-18/1)

TENDER FOR THE SUPPLY OF
HYPER-CONVERGE INFRASTRUCTURE SOLUTION FOR
ELCHK, SOCIAL SERVICE HEAD OFFICE

Closed on 16th August 2017 at 12:00PM

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Notes for Tenderers

1. Content List

The tender document identified as ELCSS-HO-IT-HW/2017-18/1 comprises the following:

- (a) Notes for Tenderers
- (b) Interpretation
- (c) Background Information
- (d) Part I - Terms of Tender
- (e) Part II - General Conditions of Contract
- (f) Part III - Tender Specification
- (g) Part IV - Special Conditions of Contract
- (h) Part V - Offer to be Bound
- (i) Part VI - Memorandum of Acceptance

2. Tender Preparation

Tenderers must **complete Part V** (Offer to be Bound) of the Tender Form and submit Tenders in **DUPLICATE** having attached thereto all Tender Documents with the items in the Tender Schedule fully priced, cost and totaled and all necessary information provided which are necessary for tender evaluation. **Failure to comply with this requirement will render the tenders invalid.**

3. Validity of Offer

Tenderers are requested to note that the validity of their offers will remain firm for a period of **90 days** from the closing date of this tender. Should they be unable to meet this, they must clearly indicate in the space provided in the tender schedule the period for which their tender is valid for acceptance. Tenderers shall also state clear the validity period of offer in their tender for optional items if different to their core items.

4. Assessment of Tender Prices

The tender prices will be assessed on the basis of capital costs including software license, supply of hardware, infrastructure installation and setup plus the estimated maintenance and add-on services, and other charges on the estimated quantity of items specified in the tender.

5. Tenderers' Responsibility

It is mandatory that tenderers responding to this tender should bid for all hardware and software components and services specified in Part III of this tender, and must be the single point of contact for all the related activities.

6. Information and Descriptive Literature

Complete product information, including technical and descriptive literature, must be submitted with the proposal. Information submitted must be sufficiently detailed to substantiate that the products offered meet tender specifications or not.

7. Tenderer Enquiries

For further enquiry regarding this tendering should be in writing to the email address of it-hw-201718-01@elchk.org.hk or contact Mr. Wah at 3692-5468 for general enquires.

8. Written Instruction Procedure

Only communications from the tenderers which are signed and in writing will be recognized by ELCHK, Social Service Head Office as duly authorized expressions on behalf of the tenderers.

9. Addenda to Proposal

All addenda to this tender will be in writing with content and number of pages described and forwarded by mail to all tenderers known to be in receipt of this tender. Tenderers must acknowledge receipt of all addenda.

INTERPRETATION

In this form unless the context otherwise requires

“Contract”	means the contract hereunder and reference to the terms thereof shall include the terms of tender in Part I unless inconsistent with the context of such reference;
“Contractor”	means the ‘tenderer’ whose tender is accepted as hereinafter provided;
“Agency”	means ELCHK, Social Service Head Office (ELCSS)
“Agency Representative”	means Chief Executive acting for and on behalf of ELCHK, Social Service Head Office (ELCSS) or any duly authorized officer for the time being performing his duties;
“Goods”	means equipment, software, articles, materials, service and technology to be supplied by the Seller to the Buyer referred to in the Specification or, as the context requires, any several part or combination thereof;
“Solution”	means supply of infrastructure design for applying the “Goods” in order to maximize the benefits of “Agency”.
“Tenderer”	means the person or persons and/or the firm or the company referred to in Part V;
“Tender Closing Date”	means the latest date by which tenders may be lodged.
“Date of Acceptance of Goods”	means the date which the Official Acceptance Notice for all the ordered Goods is issued by the Agency Representative to the Contractor
“Specification”	means the technical description of Goods contained in this Invitation to Tender or, as the context requires, in the detailed technical proposal relative to any Order;
“Order”	means an order for the supply of Goods placed by the Agency with the Contractor against the Contract;
Successful tenderer	“Successful tenderer”, “Vendor” and “Contractor” are used interchangeably throughout this document
Vendor	“Successful tenderer”, “Vendor” and “Contractor” are used interchangeably throughout this document
Contractor	“Successful tenderer”, “Vendor” and “Contractor” are used interchangeably throughout this document

BACKGROUND INFORMATION

A virtualization Solution on infrastructure is being sought by ELCSS to host several mission critical applications which going to be launched in different time frame of the coming 3 years for replacement of the running version or for hosting new IT project. These applications are being accessed by large number of users through internet/VPN on data input, computing and information enquiry. Meanwhile, data will be drilled for generating different kinds of analysis reports and dashboards' measurement concurrently by them. The proposed solution must provide a stable, reliable, efficient virtual environment with high availability and sufficient capacity for running the applications (Appendix 1). ELCSS deployed a VM infrastructure in traditional approach on 2015 (Appendix 2) for hosting a HRM application. Instead of deploying the solution in traditional approach for these critical applications, hyper-converge solution is tendered. Tenderer should proposed a complete hyper-converge solution with referring to the conceptual design of the virtualization solution in traditional approach and specification of relevant equipment, moreover, on the integration of and having synergy with the proposed solution and existing VM infrastructure.

Part I TERMS OF TENDER

1. Invitation to Tender

Tenders are invited for the supply of Goods and Solution specified in the Schedule to be delivered subject to and in accordance with these Terms of Tender, the General Conditions set out in Part II and the Special Conditions set out in Part IV hereof.

2. Tender

- (a) This tender relates to the supply of Solution and all or any Goods of such dates or during such validity period of offer as specified in the Schedule.
- (b) The Schedule issued with this tender must not be altered by the tenderer. Any modification of the Schedule considered necessary by the tenderer should be the subject of a separate letter accompanying the tender. Figures should be altered or erased; any alteration should be effected by striking through the incorrect figures and inserting the correct figures in ink above the original figures. All such amendments should be initialed by the tenderer in ink.
- (c) Tenders are to be completed in ink or typescript tenders not so completed may not be considered.
- (d) Tenders may not be considered if complete information is not given with the tender or if any particulars and data asked for in the Schedule are not furnished in full.
- (e) A short-list of qualified prospective tenderers may be invited to attend tender interviews to present their proposed solution and clarify all uncertain issues stated in their tender. Unable to attend the tender interview may lead to disqualify of their tender.

3. Tenders to Remain Open

Tenders shall unless otherwise indicated by the tenderer and agreed by the Agency, remain open only for 90 days after the tender date.

4. Prices Etc

The prices to be quoted by the tenderer are to be shown in Hong Kong currency and must only be quoted on the attached Schedule and such be net prices allowing for all trade and cash discounts and shall include the cost of containers, packing, packing materials and delivery to destination as directed by the Agency.

5. Acceptance

The Contractor will receive as an indication of acceptance the duplicate copy of the Part VI thereof duly completed. Tenderers who do not receive any notification within 30 days after the expiration of the offer mentioned in Clause 3 above shall assume that their tenders have not been accepted.

6. Saving

The Agency is not bound to accept the lowest or any tender and reserve the right to accept all or any part of any tender at any time within the period mentioned in Clause 3 hereof.

Part II GENERAL CONDITIONS OF CONTRACT

1. Total Quantities

Orders which placed and deliveries which made for the supply of Goods by Contractor must in accordance with the quantities which confirmed by the Agency on the written order with authorized signature with chop.

2. Assignment

The Contractor shall not, without the written consent of the Agency assign or otherwise transfer this Contract or any essential part share or interest therein, and the performance of this Contract by the Contractor shall be deemed to be personal to him.

3. Goods, Specifications and Proof Notes

- (a) The Goods shall be of the qualities and sorts described and equal in all respects to any specifications or drawings mentioned in the Schedule or to any specifications, drawings or samples supplied by the Contractor before acceptance to this tender.
- (b) Any drawings and specifications reasonably required for the Contractor's guidance in the execution of this Contract shall be furnished to him by the Agency free of charge but shall be returned on completion of the Contract.
- (c) If required, the Contractor shall furnish the Agency with a proof note or certificate showing that the Goods have been subject to the normal tests for such Goods or such tests as the Agency reasonably require.
- (d) All Goods not otherwise specified shall be in accordance with British Standard Specifications where such exists.
- (e) All Goods shall be in brand new unused condition, recycle goods will not be accepted.

4. Delivery

The Contractor shall, on receipt of a written order from the Agency supply and deliver in accordance with the delivery conditions specified in the Schedule and to the destination named in such order and in this connection, time shall be deemed to be the essence of the Contract. Each delivery shall be accompanied by a copy of the order, and the Contractor shall ensure that he obtained a receipt thereof from the Agency, but such receipts shall not constitute an acknowledgement that the Goods therein mentioned are acceptable or satisfactory.

5. Conveyance

The Contractor shall at his own expenses deliver the Goods to the destination specified in the order and shall be responsible for delivery in good condition.

6. Inspection and Acceptances

All deliveries of Goods will be subject to inspection and accordingly shall not be deemed to have been accepted unless the Agency shall furnish the Contractor with an Acceptance Note after the acceptance test for all infrastructure components supplied by tender has been passed.

7. Rejections

- (a) Without prejudice to any statutory rights the Agency may reject any Goods which do not strictly conform with the conditions of sub-clause (a) of Clause 3 of this Part on which are damaged, spoiled or soiled.
- (b) Within 24 hours of being notified in writing by the Agency of the rejection of any Goods delivered the Contractor shall remove the same.
- (c) Within 7 days after notification of rejection or such longer period as is specified in the Special Conditions of Contract, the Contractor shall replace the Goods rejected with satisfactory Goods specified in the order or, in the case where replacement Goods have to be obtained from sources outside Hong Kong, the Contractor must advise the Agency the delivery date when replacement Goods will be delivered unless with the notification of rejection, the Agency shall have notified the Contractor that it does not require the replacement of such Goods. Unless otherwise provided in the Contractor's offer, the Agency reserves the right to apply that of Clause 11 of this Part relating to termination if replacement delivery cannot be made with the period referred to above and the Goods are urgently required to meet essential requirement of the Agency.
- (d) If it shall be proved to the satisfaction of the Agency that the Contractor has offered for delivery any Goods which have previously been rejected by the Agency, the Agency shall immediately thereupon be at liberty, to terminate this Contract in manner provided in Clause 11 of this Part and subject to the provision of such Clause.

8. Empties

If the Contractor in his tender has requested the return of empties to him he shall be entitled unless otherwise provided for under the Special Conditions to collect the same at any time after the expiration of 28 days from the date of delivery (or such earlier date as may be arranged with the Agency) at his own cost and the Agency shall not incur any responsibility in respect of the loss or damaged of such empties whilst under its control.

9. Payment for Goods

After delivery of all Goods under this Contract, an invoice stating the order number, particulars of Goods delivered and the quantity, rate and value shall be sent by the Contractor to the Agency. Unless otherwise agreed by the Agency no payments for Goods so delivered will be made until the same are deemed to have been accepted within the meaning of Clause 6 of this Part. Once accepted, payment will be made within 30 days of certification by the Agency.

10. Default

If the Contractor shall fail to deliver all or any of the Goods ordered within the time specified in such order or as otherwise provided in Clause 4 of this part, the Agency shall immediately thereupon be at liberty to terminate this Contract by notice in writing to the Contractor, but without prejudice to any claims by the Agency for breach off Contract and, in particular, the right to procure any Goods then outstanding from any other source, and the Contractor shall be liable for any sum or sums so incurred in excess (hereinafter called "any excess") of the prices quoted in the Schedule by the Contractor.

11. Recovery of Sums Due

Whenever under this Contract any sum of money should be recoverable from or payable by the

Contractor, the same may be deducted from any sum then due or which at any time thereafter may become due to the Contractor under this or any other the Agency Contract.

12. Liability for Damages or Compensation

- (a) The Agency shall not be liable for or in respect of any damages or compensation under the Fatal Accidents Ordinance, the Employees' Compensation Ordinance, the Occupiers' Liability Ordinance for the time being in force or at Common Law by or in consequence of any accident or injury to any workman or other person whether in the employment of the Contractor or any Sub-contractor and the Contractor shall indemnify and keep indemnified the Agency against all claims, demands proceedings, costs, charges and expenses whatsoever in respect thereof or in relation thereto.
- (b) In the event of any workman or other person employed on any work done in pursuance of this Contract whether in the employment of the Contractor or a Sub-contractor suffering any personal injury and whether there be a claim for compensation or not, the Contractor shall within 7 days give notice in writing of such personal injury to the Agency.

13. Bankruptcy

The Agency may at any time by notice in writing summarily terminate this contract without enabling the Contractor to compensation in any of the following events:

- (a) If the Contractor shall at any time be adjudged Bankrupt or shall have a receiving order or order for administration of his estate made against him, or shall take any proceedings for liquidation or composition under any Bankruptcy Ordinance for the time being in force or make any conveyance or assignment of his effects or composition or arrangement for the benefit of his creditors or purports so to do, or
- (b) If the Contractor, being a company shall pass a resolution or the Court shall make an order for the liquidation of its affairs, or a Receiver or Manager shall be appointed on behalf of the debenture holders, or circumstances shall have arisen which entitle the Court or debenture holders to appoint a Receiver or Manager.

Provided always that such determination shall not prejudice or affect any right or action or remedy which shall have accrued or shall accrue thereafter to the Agency.

14. Corrupt Gifts

- (a) If the Contractor or Sub-contractor or any employee or agent of the Contractor or Sub-contractor shall be found to have committed an offence under the prevention of Bribery Ordinance for the time being in force or any subsidiary legislation made thereunder or under any law of a similar nature in relation to this or any other the Agency Contract, the Agency may, summarily terminate this Contract or Sub-contract, as the case may be, without entitling the Contractor or Sub-contractor to any compensation thereto.
- (b) The Contractor or Sub-contractor shall be liable for all expenses necessarily incurred by the Agency as the result of the termination of this Contract.

15. Guarantee

- (a) Without prejudice to the generality of clause 3(a) hereof, the Contractor must guarantee the quality & condition of the Goods are good and can fulfill the requirement of the acceptance test before delivery and setup in the Agency's centres.
- (b) Notwithstanding clause 6 of this Part, the Contractor shall make good as soon as possible

all defects in the Goods arising from defective design, materials, workmanship or any other cause discovered within the said period.

- (c) In the event of any defect in the Goods being discovered, the Agency Representative shall inform the Contractor in writing of the nature of the defect, and if the Agency Representative does not reject the Goods, the Contractor will repair the defective Goods to the satisfaction of the Agency Representative, free of cost to the Agency.
- (d) In the event that the Contractor is required to replace any defective Goods but he does not at the same time call for the return of the defective Goods, no responsibility for the defective Goods shall rest upon the Agency and the Agency may disposal of them after a reasonable time in whatever manners as it seen fit.
- (e) If any defects are not made good within a reasonable time, the Agency may after serving notice of intent on the Contractor, proceed to rectify the defects by repair or replacement at the Contractor's risk and expense without prejudice to any other rights which the Agency may have against the Contractor.
- (f) The Contractor shall remain liable to the Agency under the terms of this clause whether or not the Goods, or any other thereof, were manufactured by him, and the Contractor shall ensure that the supplier of any Goods not manufactured by him shall be under the same liability to the Contractor as the liability undertakes by the Contractor to the Agency pursuant to this clause.

16. Patent Rights

The Contractor shall indemnify the Agency against all claims arising at any time on account of the manufacture of use of the Goods infringing any patent rights, copyrights or registered design rights, or on account of any claims for royalties arising from the manufacture or use of the Goods, and the Contractor shall also be liable for any cost to the Agency of negotiation or litigation that may arise from any such claims.

17. Government Regulations

- (a) The Contractor shall be responsible for complying with enactments, orders, regulations or other instruments issued by the government or other competent authority in the country of manufacture.
- (b) The Contractor shall indemnify the Agency against any penalty, loss or cost arising as a result of the Contractor's failure to comply with any of the said enactments, orders, regulations, or other instruments and in addition the Agency reserves the right to claim full compensation under Clause 11 of this Part in the event of the whole or any part of the contract not being completed as a result of such failure to comply.

18. These General Conditions of Contract shall apply to the extent to which they are not inconsistent with Part IV - the Special Conditions of Contract (if any set out in Part IV) of the tender.

19. The Name of the Agency is not allowed to be quoted for other activities without the assent of the Agency.

Part III Tender Specification

1. Introduction

Tenderers are invited to bid for the supply of hyper-converge infrastructure Solution with Goods for the Evangelical Lutheran Church Social Service Head Office (hereafter abbreviated as ELCSS Head Office).

2. Location of installation

The Goods acquired will be installed in our Data Centre located at Tuen Wan West and our Head Office located at Yau Ma Tin.

3. Solution Criteria

The Solution from HPE, Nutanix and EMC will be considered, other brands are not eligible for this tender.

4. Tender Requirements

- 4.1 The proposed hyper-converged Solution must be simple, cost-effective and can deliver multiple compute, memory, storage, network and graphics options to match any use case and cover a wide variety of applications and workloads.
- 4.2 The proposed hyper-converged solution must provide the easiest and fastest way to extend and simplify a virtualization environment.
- 4.3 The proposed hyper-converged solution must allow ELCSS to start small and grow, scaling capacity and performance easily and non-disruptively. Single-node scaling and storage capacity expansion provide a predictable, "pay-as-you-grow" approach for future growth as needed
- 4.4 The proposed hyper-converged solution must putting the demanding on system resources such as Disk IO of running the mentioned mission critical business application into consideration, ensure an effective virtual environment and sufficient capacity can be provided for running the applications. If there is necessary, under the request of ELCSS, Contractor is needed to assist ELCSS to fine tune the VM configuration which build on the hyper-converged infrastructure and get the mission critical application in good performance.
- 4.5 The architecture of the proposed hyper-converged solution should be a distributed system which consisting of common modular building blocks that scale linearly from 2 to 64 nodes or above in a cluster. It must be designed with a degree of resiliency that permits multiple component failures within a host and across hosts. Enable automatic failover if a node becomes unavailable. If components or hosts fail, the system needs to continue running and automatically shift workloads to other hosts without any performance degradation or system disruption.
- 4.6 The proposed hyper-converged solution must with the appliance which support at least 16 Virtual Machines. The appliance should support both solid-state drives and disk drives, and should operate in all-flash, all-disk and hybrid configurations. In hybrid systems with both flash and disk drives, fully automated tiering support (where hot data automatically moves to an SSD tier) is expected.
- 4.7 The proposed hyper-converged solution should come along with a single, intuitive console for managing all aspects of their hyper-converged systems, including hypervisor configurations, others plug into and extend hypervisor management tools, such as

vCenter or else. An efficient way should be available on supporting many hosts on as below, but not limited to:-

- Automation,
 - Ability to define policies that drive actions
 - Ability to schedule tasks
 - Activity orchestration
 - Enable third-party tools and custom scripts to interface with hyper-converged systems for Automation
 - The reports and analytics about performance, use, errors and resource planning
- 4.8 The nodes of the appliance for the proposed hyper-converged solution must with specification which equivalence to or above the specification on Clause 5 of Part III to running the virtualization platform for the mentioned business critical applications (The reference information of the applications can be referred to Appendix 1).
- 4.9 Tenderers should counter-propose the hardware configuration required if they find that there is deficiency in the above-stated configuration on providing a good performance VM environment for running the applications. Any deviations from the specification or alternative proposals will only be considered if the tenderer can provide an equivalent system with full function and technical compliance with the specifications
- 4.10 Tenderers should propose the virtualization software for running the proposed hyper-converged solution.
- 4.11 Tenderers shall quantify each item of their proposed solution point-by-point in details and attach the relevant technical papers, design documents and brochures to support their proposals
- 4.12 Tenderers shall provide the following information for the products of the solution proposed:
- Product specification and description
 - Product parts/components listing with part numbers
 - List of manuals and documents for product
 - Benchmark and performance test statistics by manufacturers and/or third parties
 - Product category or selection guide of products from manufacturers
 - Services proposal and implementation schedule
- 4.13 Tenderers shall state all system design and operational limitation such as I/O speed, hardware and software compatibility, licensing requirement, etc. together with their proposed solution in the returned tender
- 4.14 Tenderers must provide all the manuals, licenses, firmware and software on the original distribution media

Backup, Data Recovery and Protection

- 4.15 The proposed hyper-converged solution must come with mission-critical data services such as highly efficient data protection technology. It should deliver data protection under the hyper-converged umbrella, eliminating the requirement for third-party protection software and appliances.
- 4.16 The proposed hyper-converged solution must be covered data backup (local and remote) and disaster recovery. Supplier need to propose a Disaster Recovery (DR) Plan with the approach for recovering the infrastructure in case of failure be detailed. The maximum downtime to be expected must be specified (the worst scenario). Upon the request of ELCSS, supplier needed to conduct the DR drill during the implementation period and demonstrate their proposed approach works as expected
- 4.17 Contractor must design alternative (manual) operation procedures so that in any unfortunate events of failure, ELCSS could adopt the alternative procedures to continue its applicants running

Extensibility

- 4.18 The proposed hyper-converged solution should be able to extend into private and public clouds.
- 4.19 The Appliance should incorporate native integration with clouds and network traffic optimization, removing the need for cloud gateways and network optimizers.

Service, Support and Maintenance

- 4.20 Tenderers should make proposals regarding long-term infrastructure support and maintenance
- 4.21 The proposed hyper-converged solution must be backed by world-class support with a single point of contact for both hardware and software, and includes ESRS for call-home and proactive two-way remote connection for remote monitoring, diagnosis, and repair to ensure maximum availability.
- 4.22 The proposed hyper-converged solution must support one click and non-disruptive storage, hypervisor and firmware upgrade
- 4.23 Tenderers must provide detail information on level of support service and maintenance policy on proposed hardware and solution.
- 4.24 Contractor must provide the following professional service covered for implementation of the proposed solution
- I. Requirement study
 - II. Solution design
 - III. Define the solution architecture
 - IV. Hardware installation and configuration and firmware upgrade
 - V. Installation and configuration of Virtualization Software
 - VI. All necessary firmware upgrade
 - VII. Creation of new VMs
 - VIII. Configuration and fine tuning of the Virtualization environment for the business critical application
 - IX. Configuration on our existing switch for connection with the existing network and internet connection if necessary
 - X. Installation and configuration of the data protection application according to the backup plan and recovery plan which accepted by ELCSS
 - XI. Provide Physical-to-Virtual and Virtual-to-Virtual conversion service, including data and VM migration service. The migrated application and infrastructure should be workable for production.
 - XII. Setup monitor and analysis tools to manage the system performance and troubleshooting

Cost Model

- 4.25 Sufficient hardware items, licenses of software and services must be quoted for implementing and running the proposed hyper-converged solution.
- 4.26 Itemized cost breakdown for each item must be provided.
- 4.27 The cost on maintenance and support service for the first 3 years and 5 years options of the proposed hyper-converged solution after warranty must be quoted.
- 4.28 Tenderers need to propose an effective mechanism in details on pricing scheme for same appliance model to ELCSS for Single-node scaling and storage capacity expansion in the next 5 years.
- 4.29 Tenderers need to quote the price for additional professional service.
- 4.30 Payment method.

Skill Transfer

- 4.31 Clearly documented procedures, guidelines and training must be included as part of the project deliverables.

4.32 Adequate user training sessions should be provided to the IT staffs of ELCSS to help them master the required skills in managing the proposed hyper-converged infrastructure and the provided Administration Console. Suppliers must provide relevant manuals specific to the context of ELCSS for the training.

Acceptance Test and Commissioning Requirement

4.33 Contractor needed to propose an acceptance test plan and perform on-site testing on all the supplied equipment during a specific timeframe and location as prescribed by ELCSS

4.34 The acceptance test plan will include, but not limited to:-

- Integration test
- Hardware test
- Redundancy test
- Functional test
- Backup and Recovery test
- Connectivity test

5. Infrastructure Specification

Followings are the minimum specification requirements for this tender, tenderer may suggest other specification with details according to their proposed solution.

5.1 Hyper-converged Infrastructure appliance which provided by EMC, Nutanix or HPE will be accepted. However, small footprint and compact model will be highly recommended (i.e. Single appliance with capacity of 4 nodes) with the following minimum hardware configuration for **each node** : (For Production Site)

	Standard	Optional
Processor	8 cores dual sockets of Intel Xeon E5-2620 v4	10 cores dual sockets of Intel Xeon E5-2640v4
Memory	128GB	256GB or 512GB
Storage		
■ SSD Cache each node	800GB	1TB or 1.98TB or 3.96TB
■ SAS HDD	1TB x 4	1.2TB x 4

5.2 Two Ethernet Switches provide high-availability, scalable 10 Gbit/s server access for Internet Data Centers (IDCs) and large traditional data centers. The switches from the brand of Hauwei, HP, Cisco or Dell will be accepted. (For Production Site)

	Standard	Optional
10G Switches	2 x 10G Switches with 24 GE SEP or 10GE SEP+ Ports	2 x 10G Switches with 48 GE SEP or 10GE SEP+ Ports

5.3 The VMWare or Nutanix Virtualization software should be used to run the proposed hyper-converge solution, the required license per node should be included as follow: (For Production Site)

	Standard License	Optional License
VMware	<ul style="list-style-type: none"> ● VMWare vSphere Standard (version 6 or latest) ● VMWare Virtual SAN Enterprise (version 6.2 or 	<ul style="list-style-type: none"> ● vRealize Suite Standard ● vRealize Suite Advance

	<ul style="list-style-type: none"> latest) • VMWare vCenter Server Standard (version 6.0 U2 or latest) • VMWare vRealize Log Insight (version 3.3.1 or latest) 	
Nutanix	<ul style="list-style-type: none"> • Foundation – Hypervisor Agnostic • Acropolis Starter License Entitlement • Controller VM • Prim Starter Management 	<ul style="list-style-type: none"> • Prism Management Pro (3 Year Lic)

5.4 Other hardware and software required for running the proposed backup plan in production site and proposed DR plan in DR site should be included. The minimum acceptable time interval for backup is 12 hours. (Backup Server & DR Site Server should be quoted if required)

6. Tenderers' Commitment

- (a) Tenderers must confirm that the proposed items are compatible and interoperable with each other.
- (b) Tenderers should bid for all items with essential features as required by those items. However, alternatives which meet the overall objective for essential features can be considered. Additional merit will be given to the tenderer who is able to provide a total solution.
- (c) All tenderers must supply in their proposal complete product information, including technical and descriptive literature on the specified essential and optional features, if available. Information submitted shall be sufficiently detailed to substantiate that products offered meet or exceed the specifications.
- (d) In addition to the stated features, tenderers may propose any optional features that may be applicable.
- (e) All proposed features must be demonstrable in the Acceptance test. Failing that the tender will be deemed not acceptable.
- (f) For any reasons, if the said product(s) cannot be offered, other newer product with equivalent features and functions (lower specification model will not be accepted) with the same quoted price must be provided as substitution within mutually agreed period to the Agency, otherwise the Agency reserves the right to terminate this contract without compensation to Tenderer.

6.1 Tenderer's Competency

- (a) Tenderer should provide job references from their past/current customers for Virtualization and Hyper-Converge Infrastructure Solution, preferably the projects for Non-Government Organizations, with project size and scale comparable to that of ELCSS, unless the job references are past/current contacts with the Agency.
- (b) Contractor should propose Service Level Agreement, with regard to the details stipulated in Clause 4 of Part III.

7. Service Level Requirements

- (a) The Contractor should propose a service level agreement for the whole project. This is an agreement between the Contractor and the Agency on the expected service levels provided by the Contractor and the Goods. The Contractor has the responsibility to ensure that the service levels stated in the agreement can be met; while the Agency, as the user of the Goods, is responsible to inform the Contractor when it discovers non-conformance to the agreement.
- (b) The service level agreement should at least but not limited to cover the measurement in the following area:
 - i. The response time taken while a service call is placed by the user of Agency.
 - ii. The average service time taken to recover the service.

8. Upgradeability and Expandability

- 8.1 Tenderer should state all the optional expandable parts available with quoted unit price. The Agency reserves the right to order this optional parts within contractual period and/or validity period of offer.
- 8.2 Tenderer's policies on upgrading should also be stated in the tender proposals.
- 8.3 Tenderers are therefore required to quote the individual cost of each unit and if applicable. The unit cost should be fixed through the whole contractual period and the Agency reserves the right to purchase additional quantity at the quoted price.
- 8.4 However, the Agency may select at its sole option to accept all or any part of a tenderer's offers and the Agency has sole discretion whether or not to accept any of the tender irrespective of its price.

9. Warranty

- 9.1 The Contractor must provide warranty details in the proposal on the supplied Goods.
- 9.2 If applicable, the warranty period will start on the successful installation of the related Goods and accepted by the Agency with signed confirmation.
- 9.3 The terms that govern the warranty are given in various Clauses in the Part IV (Special Conditions of Contract) of the tender.

10. Maintenance

- 10.1 The Contractor is required to provide support service on delivery, installation, fault diagnosis and resolution, consultation, updating and tuning services on the proposed Goods. The Contractor takes full responsibility in maintaining every aspects of the Goods to keep it running successfully. In this respect, the tenderer is asked to provide information on the following:
 - (a) Level of free support service that will be provided;
 - I. The Contractor shall at his own expense provide all necessary procedure to effect maintenance;
 - II. In request, maintenance service should be carried out remotely through Internet or on-site if required. The contractor shall bear all the costs, including those of packing, carriage and insurance that are incurred in the dispatch, repair, return and re-installation of the delivered Goods
 - (b) Charges for the provision of services in addition to those mentioned in (a) above;

- (c) List of free documentation that will be provided for the proposed Good, and charges for supplying additional copies of manuals if required;
 - (d) Committed turnaround time on replying to service request;
 - (e) Updating and enhancement mechanism;
 - (f) Provide 7x12hrs and/or 7x24hrs support service as an option.
- 10.2 Various maintenance options with minimum 3 years period or 5 years period option which include different level of services and maintenance fee shall be provided for the Agency's evaluation.
- 10.3 The Contractor needs to provide hotline and email address for general support/enquiries during Office Hours, and 7x12hrs and/or 7 x 24hrs as an option.
- 10.4 The Contractor who is not manufacturers of the delivered Goods must indicate in their proposals commitments from the manufacturers to maintain the Goods in the event of their change of distributorship.
- 10.5 If the tenderer is not the proprietor of the proposed Goods, it must submit the evidence of the commitment from the proprietor to maintain the Good in the event that the tenderer is no longer able to do so.
- 10.6 The Contractor should warrant that the Goods will, after acceptance by the Agency, provide the facilities and functions set out in the Specification when properly used and that the documentations, which must be in Chinese or English, will provide adequate instruction to enable the Agency to make proper use of such facilities and functions.

11. Training

- 11.1 Operation training should be provided to end-users. Tenderers are required to provide the following details of the training available:
- (a) Level of free operation training that will be provided;;
 - (b) Costs, if any, for additional follow-up training if required.

12. Delivery and Installation

- 12.1 Tenderers must state in their proposals the delivery and installation lead time of Goods required after the tender is awarded.
- 12.2 Tenderers must state in their proposals whether there will be any installation charge, otherwise it will be assumed that the installation charges are included in the quoted product price.
- 12.3 Tenderers must state in their proposals whether there will be any delivery and associated charges, otherwise it would be assumed that these charges are included in the quoted product price.
- 12.4 Tenderers must state the Agency's responsibilities in the delivery and installation process.

13. Demonstration

- 13.1 The Contractor is expected to demonstrate to the Agency's representatives the features and facilities of the product they propose.
- 13.2 Demonstrations should be arranged if requested by Agency.

14. Documentation

- 14.1 Tenderers should state in the proposals the list of manuals that will be supplied together with the product. If required, tenderers will make available to the Agency's representative

the manuals for assessment during the proposal evaluation stage. The manuals will be returned to the tenderers on completion of the assessment.

- 14.2 The Contractor should provide technical information including product specification, functions and features to the Agency.

15. Reference Information

Tenderers are requested to provide the following information in the proposal:

- (c) Tenderer's company profile;
- (d) Types of products or services which are provided/sold/distributed in Hong Kong;
- (e) Number of years the tenderer has been the dealer for the proposed products;
- (f) Number of such product sold in Hong Kong;
- (g) Clients list in Hong Kong (Among the provided list, at least 3 of them must be the referee, tenderer must provide their contact point, project name and project period together with the tender submitted);
- (h) Proof of no legal litigation

16. Particulars of Offer

- 16.1 Tenderers are requested to provide the following information in respect of the products offered:-

- (i) Name of Product;
- (j) Country of Origin;
- (k) Name of Manufacturer;
- (l) Address of Manufacturer;
- (m) Brand Names;
- (n) Model Numbers

- 16.2 Tenderers must specify clearly the duration that each proposed product has been available in the market.

17. Prices and Charges

- 17.1 Tenderers are requested to submit firm offers for the duration of the contract. If it is their intention to include a price variation clause, a formula applicable for subsequent price adjustment should be provided with detailed explanatory note of the terms and constituent elements for consideration.

- 17.2 Tenderers are expected to provide free service in the integration of all Goods to render the product ready-for-use. Any extra costs and charges, such as freight and insurance, testing, consultancy, which are not quoted in this tender, will be the tenderers' liabilities.

- 17.3 All discounts and/or trade-in offer if available will be considered as part of the price, Tenderer should state clear the terms and conditions where applied.

- 17.4 Tenderers are requested to submit their offers in Hong Kong Dollars.

18. Format of Proposal

The Proposal shall be prepared simply and economically, providing a straightforward, concise delineation of tender capabilities to satisfy the requirements of this part of the tender.

Part IV SPECIAL CONDITIONS OF CONTRACT

1. Contractual Period

The contractual period shall be effective from the date of acceptance of tender to the fulfillment of contractual obligations.

2. Statement of Compliance

Tenderers are requested to confirm that their offers submitted comply with the required specifications. If an offer is not identical with the tender specifications, tenderers should provide full details of the alternative offer for consideration, but the Agency reserves the right to accept or reject any offer that is not identical with the original specifications.

3. Accuracy of Tender Process

Tenderers should **DOUBLE CHECK** the prices quoted for accuracy before submitting their quotations. Under no circumstances will the Agency accept any request for price adjustment on grounds that a mistake has been made on the tendered prices.

4. Quotation

- 4.1 Tenderers are requested to quote net price including maintenance, delivery and installation.
- 4.2 Tenderers are also requested to quote the maintenance charges in details for 3 years and 5 years basis.
- 4.3 Tenderers are requested to quote their offers in Hong Kong Dollars.
- 4.4 Unless clearly specified on the Tender by tenderer to the contrary, prices quoted shall be firm throughout the contractual period. However, the Contractor may be held responsible for price concession due to price fall in the market or published price reduction by manufacturer during the contractual period.
- 4.5 Tenderers are requested to return their tender in a sealed **ENVELOPE** clearly marked in the enclosed address label the tender reference number and the specified closing date in the space provided therein.
- 4.6 Acceptance of this tender will be made on an **"ITEMIZED"** or **"OVERALL"** basis.

5 Delivery and Installation

- 5.1 On the Delivery Date the Contractor shall deliver the Goods to the Agency and install the same on the Equipment at the Locations be specified.
- 5.2 Delivery Date may be changed by mutual agreement between the parties. However, consent of the Contractor is not required, if, at least 7 days prior to the Delivery Date, the Agency notify the Contractor a later delivery date for the Goods or any part therefore, in which event all other subsequent dates specified in this Contract shall be deferred accordingly.
- 5.3 Failure to deliver the Goods or any of them within the time or times specified in the Contract will, in addition to any other remedies of the Agency against the Contractor under the Contract, render the Contractor liable to deduction from the Contract price, as and for liquidated damages and not as penalty, of a sum to be calculated at the rate of 0.05% per day on the value of such Goods as are subject to the delay for each day which may elapse between the date or dates of delivery specified in the Contract if any and the actual

date(s) of delivery up to a maximum of 20% of the value of any Goods so delayed, and provided further that;

- (a) the Contractor shall have the right to present to the Agency a case for the remission of whole or part of the deduction within 3 months of the notification that such a deduction has been or will be made;
- (b) if it shall be provided to the satisfaction of the Agency that any such delay has arisen from causes which were unavoidable and could not have been foreseen or overcome by the Contractor (including delay in the supply of materials to the Contractor due to causes which were unavoidable and could not have been foreseen or overcome by the manufacturers or vendors of such materials) and provided that notice of the anticipated delay had been given by the Contractor, then the Agency may in its absolute discretion decide the extent to which the deduction may be remitted, but any deduction not so remitted shall remain in full force; and
- (c) the Contractor shall be relieved of liabilities incurred under this Clause wherever and to the extent to which the fulfillment of such obligations is prevented, frustrated or impeded as a consequence of war or conforming to any statute, rules, regulations, orders issued by any Department of the Government of the HKSAR, the Agency or other competent authority.

6. Termination

The Agency have the right to terminate the contract if the Contractor is in default of any of the provisions of the contract and such default shall not have been remedied to the satisfaction of the Agency within a period of 30 days after written notification of such default has been given to the Contractor. In the event that such default is not remedied within the said period, notice of termination may be given to the Contractor in writing and shall have immediate effect. Such termination shall not prejudice any rights which shall have accrued to the Agency as at the date of termination.

7. Force Majeure

Neither party shall be deemed to be in default of any provision of this contract, or for any failure in performance, resulting from acts or events beyond the reasonable control of such party. For purposes of this contract, such acts shall include, but not limited to Acts of God, civil or military authority, civil disturbance, war, strikes, fires, other catastrophes, or other "force majeure" events beyond the parties' reasonable control; provided, however, that the provisions of this clause shall not preclude the Agency from canceling or terminating this contract (or any order for any equipment and software included herein), regardless of any force majeure event occurring to the Contractor, except that, in such event, the Agency shall give the Contractor 90 days prior written notice of the Agency's intent to so cancel or terminate this contract, and during the said 90 days period, the Contractor shall have failed to cure such delay or failure leading to the Agency's intention in canceling or terminating the contract.

8. Indemnities

The Contractor shall fully indemnify the Agency against all actions, claims, demands, costs, charges and expenses arising from or incurred by reason of any infringement or alleged infringement of copyright, patent, registered design or any intellectual property rights on the possession and use of the hardware and software.

9. Agreement Coverage

- 9.1 Any written commitment by the Contractor within the scope of this contract shall be binding upon the Contractor whether or not incorporated into a product order. Failure of the Contractor to fulfill any such commitment shall render the Contractor liable for liquidated or other damages due to the Agency under the terms of the contract.
- 9.2 For the purpose of this contract a commitment by the Contractor includes;-
- i. Any warranty or representation made by the Contractor in a proposal as to hardware or software features, any other physical, design or functional characteristics of a machine , system, or installation date;
 - ii. Any warranty or representation made by the Contractor concerning the characteristics of items described in sub-Clause 9.2 (i) above made in any literature, description, damages, or specifications accompanying or a referred proposal;
 - iii. Any modification of or affirmation or representation as to the above which is made by the Contractor in or during the course of negotiations whether or not incorporated into a formal amendment to the proposal in question;
 - iv. Any representation by the Contractor in a proposal, supporting documents or negotiations subsequent thereto as to training to be provided, services to be performed, prices and options to extend the contract committed to remain in force over a fixed period of time, and accepted by the Agency as a condition of sale, or any other similar matter regardless of the fact that the duration of such commitment ay exceed the duration of this contract

10. Confidentiality

The Contractor undertakes to treat as confidential all information which may be derived from or obtained in the course of the contract or which may come into the possession of the Contractor, his employees, servants, or agents as a result of or in connection with the contract.

11. Charity Discount

The equipment/Licensed Programs listed in the tender are required for charitable organization usage and tenderers are requested to offer their prices on the equipment/Licensed Programs with net charitable prices which should be lower than those applied to the commercial field. (If applicable under individual company's policy)

12. Terms of Payment

The Contractor agrees there shall be no increase in maintenance fees for the duration of this contract unless this has been explicitly quoted by the Contractor at the tender proposal and accepted by the Agency.

**PART V
OFFER TO BE BOUND**

1. It is acknowledged that I/We, the undersigned/the limited company hereunder mentioned do thereby agree to supply all or any portion of the Goods specified in the Schedule which may, during the period or period specified in the Schedule hereto be ordered by the Agency at the prices quoted in the Schedule free of all other charges subject to and in accordance with the Terms of Tender, the General Conditions of Contract and (if any) the Special Conditions of Contract.
2. I/We, for myself/ourselves and the firm and partners therein/limited company hereunder mentioned hereby warrant that the sale and/or supply of the Goods or any of them by me/us/the said firm/limited company will not infringe any patent in respect thereof registered under the Registration of United Kingdom Patents Ordinance (Chapter 42).
3. I/We enclose the copy of my/our/the Company's Business Registration and also certify that the particulars given by me/us below, are correct

1. The number of my/our/the Company's Business Registration Certificate is
2. The date of expiry of my/our/the Company's Business Registration Certificate is

4. I am the Secretary/Managing Director of the limited company hereinafter mentioned and duly authorized to bind the said Company by my signature.

I am a partner/We are partners in the firm hereinafter mentioned and duly authorized to bind the said firm and the partners therein for the time being

5. This tender is submitted with the authority and on behalf of
Company Limited whose registered office is situated
at

- or -

This tender is submitted on behalf of myself/ourselves and the firm known asor

6. In the event of any queries relating to our offer please contact Tel No.

7. Name(s) and address(es) of person(s) signing
.....of
.....of

Signatures
(.....)
Name in block letter

Dated thisday of20....

- Note : (1) All the particulars required above must be completed.
(2) Strike out clearly alternative which are not applicable.

Part VI
MEMORANDUM OF ACCEPTANCE

On behalf of ELCHK, Social Service Head Office I
..... (Name and position held by officer) accept your offer in
accordance with the Terms of Tender and Conditions of Contract attached hereto for the following
item(s)

.....
.....
.....
.....
.....
.....
.....
.....
.....

Dated thisday of20.....

Signed for and on behalf of
ELCHK, Social Service Head Office

in the presence of

.....

.....

Data transaction volume of ELCSS**Financial Management System (This old version will be replaced)**

Database: Microsoft SQL Server

Data Size : >30GB

No. of GL transaction: 1,388,931/year (approx. 9,722,517 transactions were kept up to 2017)

No. of Users: 1000

Service Management System (This old version will be replaced)

Database (Existing) : MySQL

Database (New version): Microsoft SQL Server

Data Size : >42GB

No. of transaction

 Receipt records for program registration: > 840,000

 Case logs for client: >1, 500,000

No. of Service User records: > 300,000

No. of System Users : > 2000

Home Care System (New project)

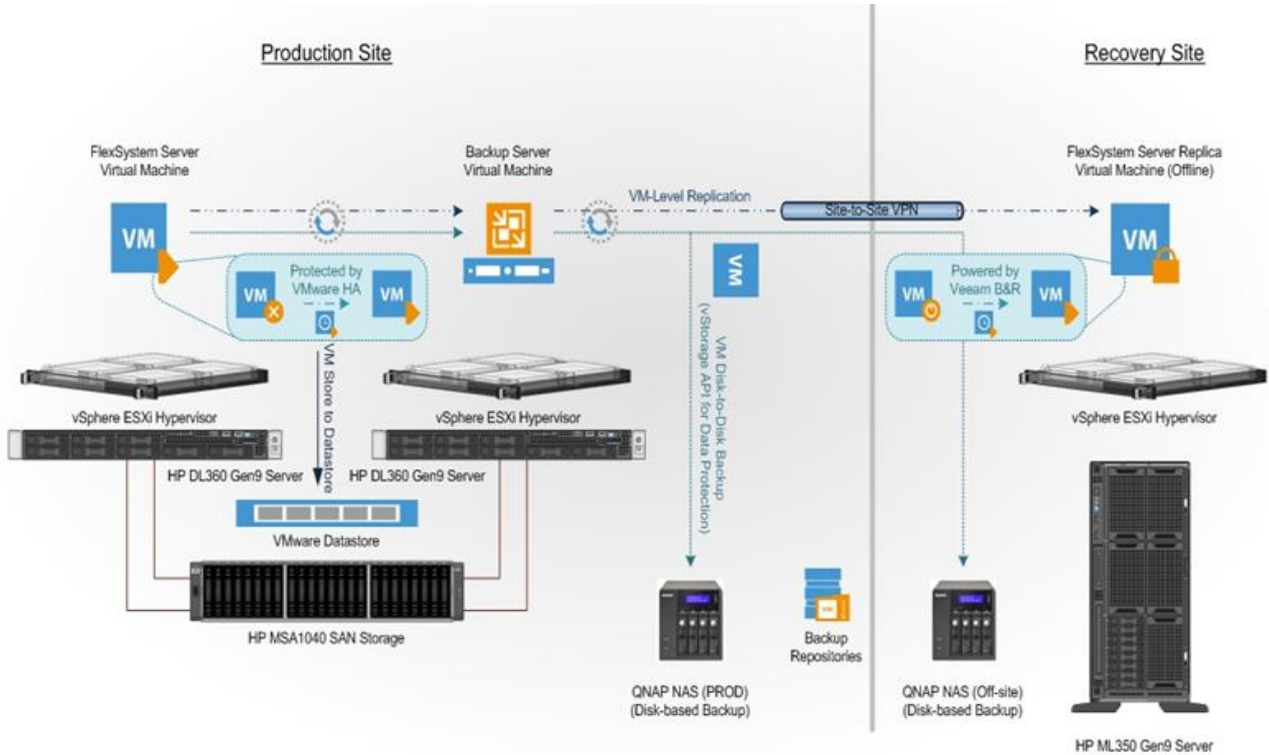
No. of Case records: > 900

No. of transaction: >300,000

No. of System Users : > 300

Appendix 2

Existing Design of the Virtualization Infrastructure installed in ELCSS



Hardware Specification

Item	Production	Recovery Site
Server	HP DL360 Gen 9 <ul style="list-style-type: none"> ➢ 2 x E5-2620 v3 2.4GHz 6-Core ➢ 8 x 8GB (Total 64GB RAM) ➢ 2 x 300GB 15K SAS (RAID-1) ➢ 4 x 1Gb-E (Network) ➢ 2 x 8Gb-FC (Storage) ➢ 2 x RPS 	HP ML350 Gen 9 <ul style="list-style-type: none"> ➢ 2 x E5-2620 v3 2.4GHz 6-Core ➢ 6 x 8GB (Total 64GB RAM) ➢ 8 x 600GB 10K SAS (RAID-5 + HS) ➢ 4 x 1Gb-E (Network) ➢ 2 x RPS
Storage	HP MSA 1040 <ul style="list-style-type: none"> ➢ Dual Controller with 4 x 8Gb-FC ➢ 8 x 600GB 10K SAS (RAID-5 + HS) 	N/A
Backup	QNAP TVS-471 4 x 4TB NL SATA (RAID-5)	QNAP TVS-471 4 x 4TB NL SATA (RAID-5)
Network	Switch <ul style="list-style-type: none"> ➢ 2 x Cisco SG90D-o8 8-Port 1Gb 	Switch <ul style="list-style-type: none"> ➢ 1 x Cisco SG90D-o8 8-Port 1Gb
Software	<ul style="list-style-type: none"> ➢ 4 x Windows Server Standard ➢ 5 x Symantec Endpoint Protection ➢ 1 x VMware vSphere Essential Plus ➢ 4 x Veeam Backup & Replication Plus 	<ul style="list-style-type: none"> ➢ 2 x Windows Server Standard