INVITATION TO QUOTE
ITQ REF NO: NKF/BL/2015/015
Date: 30 September 2015

TITLE : FOR THE PROVISION OF DESIGN AND IMPLEMENTATION OF DISASTER RECOVERY SOLUTION FOR NKF

1. Introduction

1.1 The National Kidney Foundation ("**NKF**") wishes to invite vendor (the "**Vendor**") for the provision of design and implementation of Disaster Recovery Solution for NKF as detailed in **Annex A**.

2. Requirement Specification

2.1 Please refer to **Annex A** for details.

2.2 For any enquiries pertaining to the requirement, please contact Mr Soh Seng Boon, Assistant Manager, Information Technology at 6506 2111.

3. Delivery Schedule

3.1 Expected completion date: End of February 2016

4. Compulsory Site Briefing

4.1 A briefing will be conducted at the date, time and place specified below:

Date: 5 October 2015, Monday
Time: 10 am
Venue: The National Kidney Foundation
81 Kim Keat Road
Singapore 328836

4.2 ITQ bid submitted by Vendors who did not attend the session will not be considered.

5. Submission of ITQ

5.1 The quotation submitted by the Vendor shall be as in "**Price Schedule**", **Annex B**. The quotation may be submitted by hand or post in a sealed envelope and endorsed with the words "**Invitation to Quote Ref No NKF/BL/2015/015 – Provision of Design and Implementation of Disaster Recovery Solution**". All submission should be no later than **13 October 2015, Tuesday, 3pm** (the "**Closing Date**") and attention to Ms Berlyn Liw, Purchasing Department:

If sent by hand

To deposit to : ITQ Box A
Security Counter
National Kidney Foundation
81 Kim Keat Road
Singapore 328836
Attn: Ms Berlyn Liw

If sent by post: National Kidney Foundation
81 Kim Keat Road
Singapore 328836
Attn: Ms Berlyn Liw

5.2 The submitted quotation shall be irrevocable and open for acceptance by NKF for **90 days** from the Closing Date.

5.3 The Vendor, at the point of submission of its bids, is required to provide the following information and/or documents to NKF:

5.3.1 Extract of company/business registration from the Accounting & Corporate Regulatory Authority (ACRA), showing a full list of directors/partners of the Vendor;
5.3.2 A full description of the Vendor's track record;
5.3.3 Names and contact details of at least two (2) reference customers;
5.3.4 The Vendor's latest annual report (if applicable) or published accounts;
5.3.5 Any additional information or materials.

6. Terms and Conditions

6.1 The Terms and Conditions as set out in **Annex C** shall form part of the binding contract between the successful Vendor and NKF. The Vendor shall perform the Services according to the requirements specified in Annex A.

6.2 The successful Vendor may be required to enter into further documentation with NKF and shall do so, if so required by NKF.

7. Price Quotations

7.1 All prices quoted by the Vendor shall be in the lawful currency of the Republic of Singapore.

7.2 All prices quoted by the Vendor shall represent the total cost to NKF.

Annex A

Requirement Specifications

1. Objectives

1.1 Design an IT solution to ensure the continuation of vital IT system in the event that a disaster occurs. This solution should provide an effective method that can be used to recover all vital IT systems when activated.

Refer to **Appendix 1** for the list of vital systems and current environment.
Refer to **Appendix 2** for current network average utilization.
Refer to **Appendix 3** for Requirement.

2. Deliverables

2.1 Design and implement a disaster recovery setup at one of NKF's Dialysis Centers.

2.2 A Report on how when activated the Disaster Recovery site can be accessed and provide the continuous operation of vital systems for the organization.

2.3 Provide implementation guide / technical documentation of the setup and configuration.

2.4 Documentation and knowledge transfer to ensure that NKF is able to maintain the solution post-implementation.

3. Project Phase

3.1 Phase 1: Complete installation of solution at NKF's designated DR site according to the criteria provided by NKF. Please refer to **Appendix 3.**

3.2 Phase 2: Successfully executed a trial run of the solution according to the specifications set by NKF and upon NKF acceptance.

3.3 Project Sign-off: Acceptance of project documentation and knowledge transfer.

4. Payment matters

4.1 Progressive payment

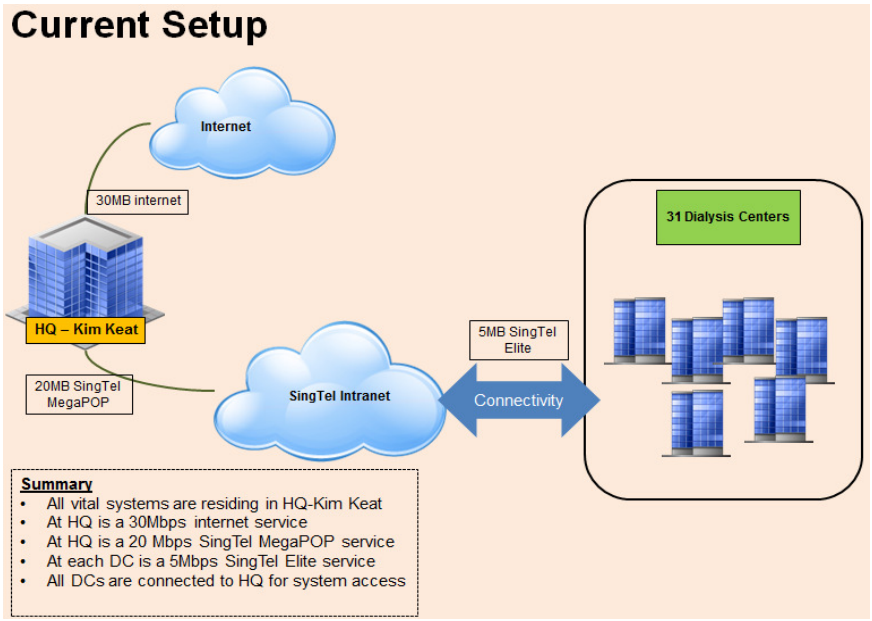
Delivery of Equipment	1st payment – 50%
Phase 1 Sign off	2nd payment – 20%
Phase 2 Sign off	3rd payments – 20%
Project Sign off	4th payment – 10%

Appendix 1

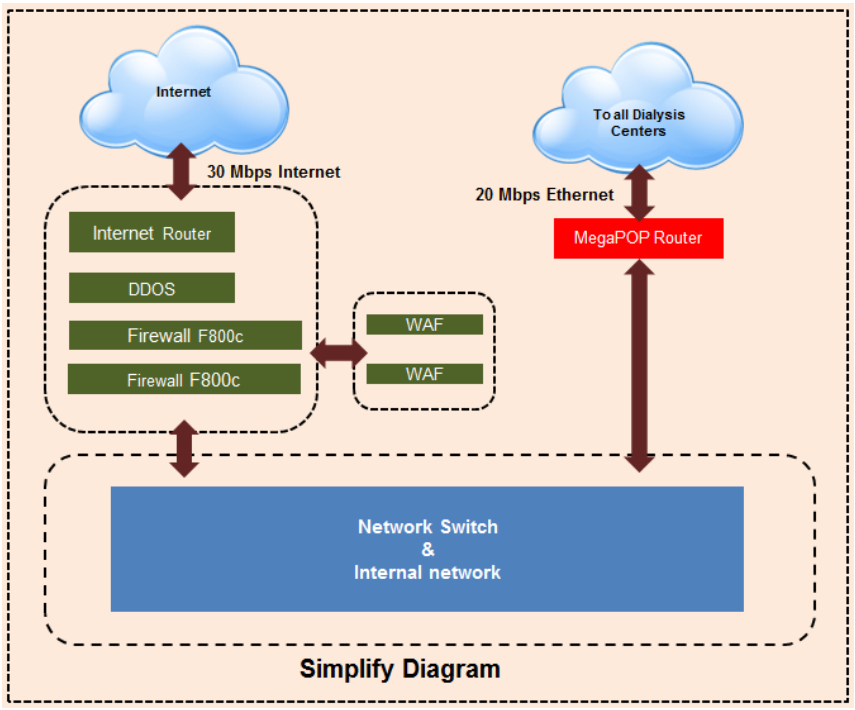
Vital System: VMWARE VSPHERE 5.1

S/N	Vital System	Function	Total HDD	C Drive	D Drive	vCPU	vMemory
1	File Server	File server	2	30	80	4	4,088
2	CRM Server 1	MS CRM	2	40	90	8	12,288
3	CRM Server 1	MS CRM	2	40	90	8	12,288
4	Application DB	SQL DB	2	50	1000	8	24,576
5	Application Web	Web Server	2	40	60	8	8,192
6	Application DB	SQL DB	2	30	20	1	7,936
7	Application Web	Web Server	2	40	20	1	8,192
8	Application DB	SQL DB	2	40	100	2	8,192
9	Application Web	Web Server	2	40	20	2	4,096
10	Web & DB	Web Server + SQL DB	2	40	90	4	8,192
11	ERP Server	ERP Server	2	50	10	8	8,192
12	File Print	File/Print	2	40	50	2	4,096
13	AD Server	AD	1	30	NA	2	4,096
14	AD Server	AD	1	30	NA	2	4,096
15	SharePoint	SharePoint	2	40	100	8	8,192
16	SQL Server	SQL DB	2	50	300	8	16,384
17	Web Server	Web Server	2	20	10	1	2,048
18	Web Server	Web Server	2	20	10	1	2,048
19	Database	Database	2	60	100	4	12,288
20	Web Server	Web Server	1	40	NA	2	6,144
21	Vmmanage	Vcenter	2	60	10	4	16,384
22	FTP Server	FTP	1	40	NA	1	4,096
23	Web Server	Web Server	1	30	NA	2	8,192
24	Web Server	SQL DB	2	40	75	4	12,288

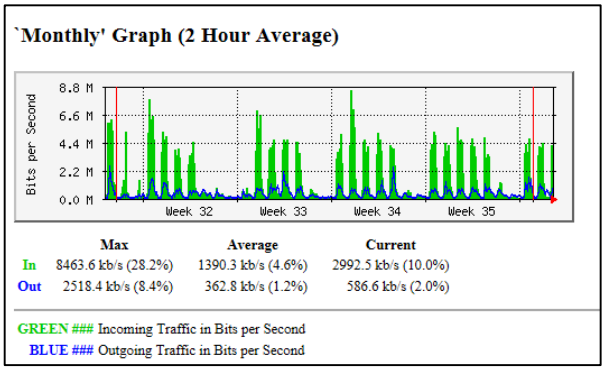
Current environment: Internet and Intranet (MegaPOP service)



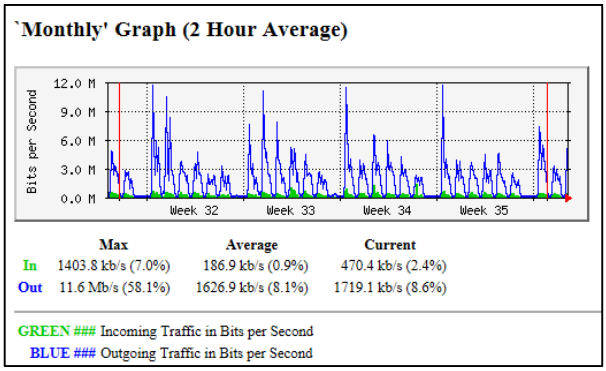
Appendix 2



Internet 30MB



SingTel MegaPOP 20MB



Appendix 3

NKF: Disaster Recovery Plan - Business and Compliance Requirement

Hardware Requirements

S/N	Requirement	Comply (Yes / No)	Remarks (If yes, pls indicate example or technology that support)
	Example : *The product (Hardware & Software) in the proposal Must have a local office in Singapore.*	*Yes*	*Indicate the address*
1	**Hardware** The hardware requirement of the solution MUST be able to meet the actual production system specification. E.g. When DR activated, the salutation MUST cater to the actual computing needs of our production system (actual production spec is attached).		
2	**Footprint** Ideally, the hardware provided should occupy a small footprint. Example: Not more than 4U rack space. The hardware will be located at an offsite location with limited space and power.		
3	**Scalability** The solution must allow for future expansion i.e. to be able to scale up without major reconfiguration.		
4	**Maintenance Requirement** There should be only 1 maintenance contract for the whole solution.		

Technology (Software)- Offsite Replication and Disaster Recovery

S/N	Requirement	Comply (Yes / No)	Remarks (If yes, pls indicate example or technology that support)
1	**VMWare Supported** Solution must fully be based and endorsed by VMWARE. Solution must be able to scale and support future VMWARE version.		
2	**Virtual Disaster Recovery** Solution must be able to simulate a Virtual Recovery		
3	**Agentless Solution** Agentless (no agent need to be installed on current production system) and is able to backup any selected VMs.		
4	**Compression** Ability to support compression of data to reduce bandwidth consumption.		
5	**CDP (Continuous Data Protection)** Solution must be classified under near Zero-CDP or CDP.		
6	**Network** The solution should be able to leverage on the existing network architecture i.e. no additional investment in network bandwidth. If required the cost should not exceed 50% of the existing network cost. Please provide justification on the increase in bandwidth if needed.		

Management of the Disaster Recovery Solution

S/N	Requirement	Comply (Yes / No)	Remarks (If yes, pls indicate example or technology that support)
1	**Management Console** A Central management console for orchestrating the backup and disaster recovery.		
2	**Reports** The system must generate reports showing: 1) Backup sets report 2) Backup/Restore status report 3) Statistical Summary Report 4) Restore activity report 5) Backup trend report 6) Activity logs 7) Event logs 8) Audit trail		
3	**Error reporting** The system must be able to alert the customer to failed backups or other errors via email notification.		

Security Aspects of the Disaster Recovery Solution

S/N	Requirement	Comply (Yes / No)	Remarks (If yes, pls indicate example or technology that support)
1	**Encryption** Data to be backed up offsite must be encrypted before transmission. Please specify the type of encryption the proposed solution uses.		
2	**Access control** Only the authorized users will be able to access the control panel to access the backup sets.		
3	**Minimal network port for transportation** For basic backup functions, the system should need only 1 port to be opened. This port should be an outgoing port only. Please specify the port(s) needed for the operation.		

Professional Services Configuration, Testing, and Support

S/N	Requirement	Comply (Yes / No)	Remarks (If yes, pls indicate example or technology that support)
1	**Minimal Disruption @ Installation** There should be little or no impact required to NKF existing Infrastructure setup when installing the solution.		
2	**Configuration** Vendor will perform the installation of the solution without downtime to the production servers.		
3	**Initial backup** Vendor to provide all setup and configuration.		
4	**Demonstration of Solution** Trial run needed: After installation of the solution, a complete disaster recovery test must be carried to simulate the DR exercise.		
5	**Support** The vendor support must have capability to provide 24x7 support and alert services for fault reporting.		

Vendor Requirement

S/N	Requirement	Comply (Yes / No)	Remarks (If yes, pls indicate example or technology that support)
1	**Track record** The vendor should have a proven track record of successfully implementing and supporting the proposed Backup & Recovery solution in some sites. Please provide reference accounts with contact details.		
2	**Support Team** Please provide details of the technical personnel who will be implementing and supporting the proposed solution.		
3	**BCM certification** Ideally the preferred vendor should be BCM ISO22301 certified.		

Accepted By:

Authorised Signature : _____

Signatory's name: _____ Signatory's title : _____

Vendor's name : _____ Vendor's stamp : _____

Annex B

ITQ REF NO. NKF/BL/2015/015

Date : 30 September 2015

TITLE : FOR THE PROVISION OF DESIGN AND IMPLEMENTATION OF DISASTER RECOVERY SOLUTION FOR NKF

PRICE SCHEDULE

S/N	Item	Price (exclusive of GST)
1	**Project cost with 3 years warranty and maintenance**	
1.1	Hardware cost	
1.2	Software cost	
1.3	Implementation cost	

2	**Annual recurring maintenance cost**	
2.1	Hardware cost	
2.2	Software cost	
2.3	Support maintenance (optional)	

Grand Total (1+2)	

Accepted By:

Authorized Signature : _____

Signatory's name : _____ Signatory's title : _____

Vendor's name : _____ Vendor's stamp : _____

Annex C

Terms and Conditions

1. Confidentiality

1.1 The Vendor agree to treat as confidential all information received from NKF where NKF has indicated in writing or labelled to be "Confidential", "Proprietary Information" or with any other comparable legend to similar effect, at the time of disclosure (or if disclosed orally, confirmed in writing by NKF as such within fifteen (15) days after its disclosure), which it may acquire in relation to NKF, including but without any limitation whatsoever, all business information, strategic and development plans, any matter concerning NKF, its affairs, business, shareholders, directors, officers, business associates, clients, patients or any other person or entity having dealings with NKF; information relating to the financial condition of NKF, its accounts, audited or otherwise, notes, memoranda, documents and/or records in any form whatsoever whether electronic or otherwise, and all records indicative of the financial health and status of NKF; technical information in any form whatsoever whether electronic or otherwise; information in any form whether electronic or otherwise, relating to methods, processes, formulae, compositions, systems, techniques, inventions, machines, computer programs, software, development codes and research projects; business plans, co-developer/collaborator identities, data, business records of every nature, customer lists and client or patient database, pricing data, project records, market reports, sources of supply, employee lists, business manuals, policies and procedures, information relating to technologies or theory and all other information which may be disclosed by NKF to the Vendor which the Vendor may be provided access by NKF whether stored electronically or otherwise; all information which is deemed by NKF to be confidential or which is generated as a result of or in connection with the business of NKF and which is not generally available to the public; and all copies, reproductions and extracts thereof, in any format or manner of storage, whether in whole or in part, together with any other property of NKF made or acquired by the Vendor or coming into their possession or control in any manner whatsoever (the "**Confidential Information**"), which shall be and remain the sole property of NKF and shall be returned to NKF forthwith on demand at any time.

1.2 The Vendor shall use all reasonable steps to ensure that any information marked as confidential or proprietary to NKF shall not be disclosed to third (3rd) parties.

1.3 The Vendor shall not, without the prior written consent of NKF, disclose any Confidential Information relating to this Contract or any of the contents hereof whether directly or indirectly to any third (3rd) party, which consent shall not be unreasonably withheld, except:-

(a) for the purpose contemplated in this Contract;

(b) with the consent of the other Party and then only to the extent specified in such consent;

(c) in accordance with the order of a court of competent jurisdiction; or

(d) to the extent as may be required by law, regulation, effective government policy or by any regulatory authority arising out of this Contract or relating to or in connection with the Vendor provided that the Vendor so required must give NKF prompt written notice and make a reasonable effort to obtain a protective order.

1.4 The restrictions on disclosure of Confidential Information described in this Clause 1 do not extend to any information that (i) already exists in the public domain at the time of its disclosure; (ii) is already in the Vendor's possession without restriction on disclosure, as evidenced by written records; (iii) is independently developed by the Vendor outside the scope of this Contract; or (iv) is rightfully obtained from third (3rd) parties.

1.5 The Vendor hereby agrees that it shall:

(a) take all reasonably necessary steps to limit access to Confidential Information of the other Party to those principals, directors, officers, agents, employees, representatives, consultants, independent contractors and professional advisors who are directly concerned with the purposes contemplated by this Contract and are made aware of its confidential status, to the extent reasonably required for the performance of this Contract, and ensure that they do not disclose or make public or authorise any disclosure or publication of any Confidential Information in violation of this Contract; and

(b) not to use any Confidential Information for any purpose other than the purposes for which it is intended, pursuant to and in accordance with the terms of this Contract.

1.6 The Vendor must promptly inform NKF about any unauthorised disclosure of NKF's Confidential Information.

2. Payment

2.1 Unless otherwise specifically provided in this Contract or otherwise agreed between the parties, NKF's obligation to pay is conditional upon its receiving an invoice from the Vendor for the amount payable, giving NKF no less than thirty (30) days from receipt of such invoice to make payment.

2.2 If any invoice is not submitted to NKF within six (6) months upon completion of the Services, NKF shall be released and discharged from any liability to make any payment of the debt in relation to such invoice.

2.3 Payment by NKF of any invoices shall not affect NKF's right to reject any of the Services or Deliverables or the Vendor's responsibility to re-perform any Services or re-deliver any Deliverables that do not conform to this Contract. NKF shall have no obligation to pay for any such Services or Deliverables which have not been re-performed or re-delivered by the Vendor in accordance with Requirement Specification in Annex A. Such non-payment shall not constitute a default or breach of this Contract by NKF. In the event of any dispute between NKF and the Contractor with respect to the invoiced Services and/or other related matters, NKF shall pay the undisputed amount and NKF and the Contractor shall promptly seek to resolve the disputed matters with the Vendor.

2.4 The Vendor shall submit such invoices or other documents as NKF may require for the purpose of making payment.

2.5 NKF shall not pay for expenses or cost of whatever nature other than those expressly set forth in this Contract.

2.6 There will be no late payment service charge of any kind.

3. Termination

3.1 Either party shall be entitled to terminate this Contract, giving the other not less than two (2) months' notice in writing and thereupon this Contract shall come to end but without prejudice to any right of action of either party against the other in respect of any antecedent breach of the terms and conditions of this Contract by the other. For the avoidance of doubt, no reason needs to be given for the said notice.

Accepted By:

Authorised Signature: _____

Signatory's name: _____ Signatory's title : _____

Vendor's name : _____ Vendor's stamp : _____