KALPANA CHAWLA GOVERNMENT MEDICAL COLLEGE, (KCGMC), KARNAL, HARYANA

AMENDMENT NO. – 1   Dated: 27.03.2015

Name of Project: Development of IT Infrastructure (HMIS, PACS, LAN, EMS, LMS & QMS) for Kalpana Chawla Govt. Medical College &   Hospital, Karnal, Haryana
Tender No. : HSCC/KCGMC/IT/2015/01

<u>Reply to Pre Bid Queries raised by bidders during pre -bid meeting held on 20.03.2015 at HSCC's Corporate Office, Noida</u>

S. No	Volume, Page, Clause and Section	Tender Document Clause	Pre-bid Queries	Reply
COMMERCIAL				
1	NIT	NIT	Please extend the submission date	No change, Tender condition prevails.
2	Vol- I, Page 5, Sr. No 1.3 Consortium Conditions	Consortium Conditions	Allow multiple vendors participation as a consortium partner.	One consortium partner is allowed for HMIS. Specialized agencies are allowed for other components as per tender's terms & conditions. Tender condition prevails.
3	Vol- I, Page 6, Sr. No 1.4- 2 Pre Qualification Criteria	ISO certification	Our ISO certification is in progress and has reached final stages. The ISO certification is expected by end of April'15. Can we participate in this tender ?We will submitted the details immediately after we get the same.	As per tender condition ISO certification is required, Tender condition prevails.
4	Pre Qualification Criteria	CMMI level	Add-To ensure that the software to be deployed at the client's end meets the high quality standard, request you to add that Prime bidder should be CMMI level 3 or higher	No change, Tender condition prevails.
5	Vol-I, Page 6, Sr. No 1.4 Pre Qualification Criteria		As the main bidder or SI, we have executed project in Govt Hospital (Port Trust Hospital, Cochin). Should the consortium company also need experience in terms of installation in Govt hospital/s ?	Consortium company should also have experience in government sector as per tender condition. Tender condition prevails.
6	Vol I, Page 8, Sr. No 1.4 -3 Pre Qualification Criteria	One Completed work of similar nature (either part of D or a separate one) costing not less than the amount equal to Rs1.2 Crore with some Central/State Government Organization /Central Autonomous Body/Central Public Sector Undertaking.	For member of consortium(other than lead member) – (D) Three similar completed works each costing not less than the amount equal to Rs1.2 Crore or 300 to 400 bedded hospitals Or Two similar completed works each costing not less than the amount equal to Rs1.8 Crore or 400 to 700 bedded hospitals Or One similar completed work of costing not less than the amount equal to Rs2.4 Crore or more then 900 bedded hospitals and One Completed work of similar nature (either part of D or a separate one) costing not less than the amount equal to Rs1.2 Crore or 300 to 400 bedded hospitals with some Central/State Government Organization /Central Autonomous Body/Central Public/ Deemed University	No change, Tender condition prevails.

7	Vol- I, Page 9, Sr. No 1.4- 3 Pre Qualification Criteria		Similar works means member of consortium should have successfully implemented Hospital Management & Information System (HMIS) including PACS and associated work including operation and maintenance services of HMIS application in a large hospital in India / International. The software should be ICD – 10, HL – 7, DICOM compliant and the member of consortium should be able to demonstrate the compliance at a location described. A satisfactory performance Certificate from client (the Chief Medical Officer or Administrative Director) must be submitted.	No change, Tender condition prevails.
8	Vol-I Page 6 Sr. No 1.4 Pre Qualification Criteria		We do have 2 Government project in India however, it does not meet the Costing mentioned by you of RS1.2 crores. Can you please eliminate the value and just ask for experience in implementing in government sector or Consider India/**Global** government project.?	No change, Tender condition prevails. Indian Government projects only.
9	Vol-I Page 6 Sr. No 1.4 Pre Qualification Criteria		1. Can we derive our old projects value in India & International at a simple rate of 7 % from the date of completion. 2. Kindly Authorize us to consider India/**Global** Government Projects to qualify and participate in this tender.	No change, Tender condition prevails. Indian Government projects only.
10	Vol-I, Page no-8,Sr. No 1.4, Sr. no 3 (ii) (D) Pre Qualification Criteria		We request you to please consider experience of HMIS implementation in **Private Hospitals** against the requirement of Central/State Government Organization /Central Autonomous Body/Central Public Sector Undertaking.	No change, Tender condition prevails.
11	Vol-I, Page 6, Sr. No 1.4- 3 Pre Qualification Criteria		Eligibility Criteria Experience of Successfully completed similar works during the last 7 years with some Central / State Govt organization. We have undertaken similar project for state Govt but the same are **under implementation** / deployment. Request you to kindly change the condition from ' completed ' to ' completed or under implementation / deployment '	No change, Tender condition prevails.
12	Vol-I, Page 9, Sr.no 1.4- 3 Pre Qualification Criteria		Experience should be in the name of the bidder/ members/ subcontract of consortium and not in subsidiary/ associate company/ Group Company etc	No change, Tender condition prevails.
13	Vol- I, Page 9, Sr. no 1.4- 3 Pre Qualification Criteria		Own work/subcontract work/ works under the **same management** including but not limited to work of subsidiary company/own certification of the agencies shall not be considered for prequalification	No change, Tender condition prevails.

14	Vol-I, Page no-9, Sr. No 1.4 - 4 Pre Qualification Criteria		Please dilute this point. Introduce "Parent company can be considered in case they deal in similar nature of work i.e "Healthcare Product Development & Services", as we share & utilize best practices.	No change, Tender condition prevails.
15	Vol I, Page no 8, Sr. No 1.4 -3 (ii) Pre Qualification Criteria		Please remove requirement of one completed work of similar nature with some govt. body for other than lead member of consortium.	No change, Tender condition prevails.
16	Vol I, Page 6, Sr. No 1.4 Pre Qualification Criteria		Bidders requested to please consider HMIS implementation experience separately from PACS as these being these two are separate products offered by separate OEMs	Experience in only PACS is not consider however if any experience in PACS then this shall be consider with the experience of HMIS. Tender condition prevails.
17	Vol I, Page no 9, Sr. No 1.4 - 4 Pre Qualification Criteria		Bidder requested to increase the value of **Turnover** of prime bidder from Rs. 14 Cr. to Rs 300 Cr.	No change, Tender condition prevails.
18	Vol- I, Page 10, Sr. No 1.4- 6 Pre Qualification Criteria	The bidder/members of consortium should have positive Net Worth and should not have incurred any loss in more them Two years in last Five years ending FY 2013-14 duly certified by the Chartered Accountant.	Please dilute this point. "should not have incurred any loss in more them Two years in last Five years ending FY 2013-14 duly certified by the Chartered Accountant."	No change, Tender condition prevails.
19	Vol I, Page no 10, Sr. No 1.4 -6 Pre Qualification Criteria		Bidders requested to **dilute Profit & Loss** conditions.	No change, Tender condition prevails.
20	Vol-I, Page 6, Sr. No 1.4 Pre Qualification Criteria		In case of consortium, We would request to consider **credentials of both** lead members or consortium bidders	No change, Tender condition prevails.
21	Vol- I ,Page 10, Point No 8 Pre Qualification Criteria	We undertake and confirm that eligible similar works(s) as mentioned in Form T-2 has/have been executed by us directly and has/have not been got executed through another agency/firm on back to back basis. Further that, if such a violation comes to the notice of Client, then I/We shall be debarred/ blacklisted for future tender of Client for five year. Also, if such a violation comes to the notice of Client before date of start of work and/or during the exaction of work, the Client/Engineer-in-Charge shall be free to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee."	**Request for Deletion -** We undertake and confirm that eligible similar works(s) as mentioned in Form T-2 has/have been executed by us directly and has/have not been got executed through another agency/firm on back to back basis. ~~Further that, if such a violation comes to the notice of Client, then I/We shall be debarred/ blacklisted for future tender of Client for five year. Also, if such a violation comes to the notice of Client before date of start of work and/or during the exaction of work, the Client/Engineer-in-Charge shall be free to forfeit the entire amount of Earnest Money Deposit/ Performance Guarantee."~~	No Change, Tender condition prevails.
22	Vol-I, page-12, Sr. No 1.15 Site survey		It is not feasible to calculate the exact bill of material for networking components and site preparation activities without doing the actual survey.	Site survey can be done; Bill of material for networking components is based on architectural drawings, Infrastructure details and as per the requirement of the client.

23	Vol- I ,Page 13, Sr No 1.21	The tender for the work shall remain open for acceptance for a period of 180 days from the date of opening of tenders. If any bidder withdraws his tender before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the tender which are not acceptable to the department, then the Client shall, without prejudice to any other right or remedy, be at liberty to forfeit 100% of the said earnest money as aforesaid. Further the bidder shall not be allowed to participate in the re – tendering process of the work.	Request for Deletion - The tender for the work shall remain open for acceptance for a period of 180 days from the date of opening of tenders. If any bidder withdraws his tender before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the tender which are not acceptable to the department, ~~then the Client shall, without prejudice to any other right or remedy, be at liberty to forfeit 100% of the said earnest money as aforesaid. Further the bidder shall not be allowed to participate in the re – tendering process of the work~~.	No Change, Tender condition prevails.
24	Vol- I ,Page 13, Sr No 1.22	This is a Time Bound Project and no time over run is acceptable/ payable. Only bidders who can deliver project in time only need to apply. This tender provides strong disincentive clause as compensation for delay of work @ 1.5 % per month of delay to be computed on a per day basis. Provided always that the total amount of compensation for delay to be paid under this condition shall not exceed 10% of the Tendered value of the item or group of items of work for which a separate period of completion is originally given.	Request for Modification- This is a Time Bound Project and no time over run is acceptable/ payable. Only bidders who can deliver project in time only need to apply. This tender provides strong disincentive clause as compensation for delay of work ~~@ 1.5 %~~ 0.5% per month of delay to be computed on a per day basis. Provided always that the total amount of compensation for delay to be paid under this condition shall not exceed ~~10%~~ 5% of the Tendered value of the item or group of items of work for which a separate period of completion is originally given.	No Change, Tender condition prevails.
25	Vol-I, Page 13, Sr No 1.22		We request to please reconsider the disincentive clause for delay of work. The **penalty** should be calculated on delayed portion not on to the complete contract price	No change, Tender condition prevails.
26	Vol- I ,Page 12, Sr No 1.15 Readiness of Site		Please provide the construction/readiness status of these zones/blocks. And also site survey.	Site visit can be done for status. Site handover at the time of commencement of work for Phase I. Refer Page No-12 Clause 1.15 & Page No.-15 Clause 2.6 in Volume-I
27	Vol- I ,Page 15, Sr No 2.6 Readiness of Site		We request you to please provide implementation period/timelines separately for phases.	Amended. Refer Sr. No-1 at Annexure-A enclosed.
28	Vol- I ,Page 23, Sr No 2.21 (c- iv) Signing of Contract	In case the Successful Bidder does not sign the Contract, Client reserves the right to cancel the selection process, forfeit any Bid Security and/or Performance Security, as the case may be, submitted by the Successful Bidder and either re-Bid or proceed in any manner that it may deem fit.	In case the Successful Bidder does not sign the Contract <u>despite deviations being duly considered by the Client</u>, Client reserves the right to cancel the selection process, forfeit any Bid Security and/or Performance Security, as the case may be, submitted by the Successful Bidder and ~~either~~ re-Bid ~~or proceed in any manner that it may deem fit~~.	No Change, Tender condition prevails.

29	Vol- I ,Page 23, Sr No 2.21 (e-ii) Sub-contracting	The agency/firm shall be responsible for observance, by all sub agencies/ firms, of all the provisions of the Contract. The Agency/firm shall be responsible for the acts or defaults of any sub-agency/firm, his representatives or employees, as fully as if they were the acts or defaults of the Successful Bidder, his representatives or employees. The Agency/firm shall provide to the Engineer, the details of all the sub contracts including terms and conditions of the contracts. The Agency/firm shall be solely responsible for the performance of the sub agency/firm and for making payments to the sub-agency/firm.	The agency/firm shall be responsible for observance, by all sub agencies/ firms, of all the provisions of the Contract. The Agency/firm shall be responsible for the acts or defaults of any sub-agency/firm, his representatives or employees, as fully as if they were the acts or defaults of the Successful Bidder, his representatives or employees. The Agency/firm shall provide to the Engineer, the details of all the sub contracts ~~including terms and conditions of the contracts.~~ The Agency/firm shall be solely responsible for the performance of the sub agency/firm and for making payments to the sub-agency/firm.	No Change, Tender condition prevails.
30	Vol- I ,Page 24, Sr No 2.21 (g) Right to modify the design	The Client shall have the right to modify the design /solution prepared by the agency/firm. The agency /firm shall comply with any such instructions by the Engineer or the Client and suitably modify the design/solution and submit the same to the Client for approval.	In case such change/modification alternation in the price quoted by the bidder, such adjustment shall be made by the Client. The changes/modifications shall be mutually acceptable to both parties.	No Change, Tender condition prevails.
31	Vol I, page No 25 Annexure – I (Checklist)		Bidder requested to add a functional Checklist to ensure all the requirements are being categorically met by the Bidders.	Checklist already mentioned in tender document Refer the Annexure-I (checklist) at Page No 25 in volume I)
32	Vol-I, Page 40 Form I (AFFIDAVIT)		Request to waive off this clause and allow back to back arrangement for some specific requirements.	No change, Tender condition prevails.
Volume -II				
33	Vol- II ,Page 4, Sr No 8.2	If there are varying or conflicting provisions made in any one document forming Part of the contract, Accepting Authority shall be deciding authority with regard to the intention of the document and his decision shall be final and binding on the Agency/firm.	If there are varying or conflicting provisions made in any one document forming Part of the contract, ~~Accepting Authority~~ it shall be decid~~ing authority~~ by a mutually appointed arbitrator as per the Arbitration and Conciliation Act, 1996 and rules framed thereunder,with regard to the intention of the document and his decision shall be final and binding on the Agency/firm.	No Change, Tender condition prevails.
34	Vol- II ,Page 5, CLAUSE 1A Recovery of Security Deposit	Refer tender document	Request deletion, as the bidder is already providing a BG upto 10% of the total contract value.	No Change, Tender condition prevails. Refer Page 5, CLAUSE 1 in Volume- II

35	Vol- II ,Page 9, CLAUSE 3 When Contract can be Determined	In the event of above courses being adopted by the Client, the agency/firm shall have no claim to compensation for any loss sustained by him by reasons of his having purchased or procured any materials or entered into any engagement or made any advances on account or with a view to the execution of the work or the performance of the contract. And in case action is taken under any of the provision aforesaid, the agency/firm shall not be entitled to recover or be paid any sum for any work thereof or actually performed under this contract unless and until the Engineer-in-Charge has certified in writing the performance of such work and the value payable in respect thereof and he shall only be entitled to be paid the value so certified.	The bidder shall be paid for all the services rendered and goods delivered till the effective date of the determination.	No Change, Tender condition prevails.
36	Vol- II ,Page 7, CLAUSE 2 Compensation	The amount of compensation may be adjusted or set-off against any sum payable to the Agency /firm under this or any other contract with the Govt. In case, the agency/firm does not achieve a particular milestone mentioned in schedule 'F, or the re-scheduled milestone(s) in terms of Clause 5.4, the amount shown against that milestone shall be withheld, to be adjusted against the compensation levied at the final grant of Extension of Time. With-holding of this amount on failure to achieve a milestone, shall be automatic **without any notice to the agency/firm. However, if the** agency/firm catches up with the progress of work on the subsequent milestone(s), the withheld amount shall be released. In case the agency/firm fails to make up for the delay in subsequent milestone(s), amount mentioned against each milestone missed subsequently also shall be withheld. However, no interest, whatsoever, shall be payable on such withheld amount.	Request for Deletion	No Change, Tender condition prevails.
37	Vol- II ,Page 9, CLAUSE 3A	In case, the work cannot be started due to reasons not within the control of the agency/firm within 1/8th of the stipulated time for completion of work, either party may close the contract. In such eventuality, the Earnest Money Deposit and the Performance Guarantee of the agency/firm shall be refunded, but no payment on account of interest, loss of profit or damages etc. shall be payable at all.	In case, the work cannot be started due to reasons not within the control of the agency/firm within 1/8th of the stipulated time for completion of work, either party may close the contract. In such eventuality, the Earnest Money Deposit and the Performance Guarantee of the agency/firm shall be refunded, ~~but no payment on account of interest, loss of profit or damages etc. shall be payable at all~~.	No Change, Tender condition prevails.

38	Vol- II ,Page 11, CLAUSE 5- 5.3	Request for rescheduling of Milestones and extension of time, to be eligible for consideration, shall be made by the Agency/firm in writing within fourteen days of the happening of the event causing delay on the prescribed form. The agency /firm may also, if practicable, indicate in such a request the period for which extension is desired.	Increase 14 days to 30 days	No Change, Tender condition prevails.
39	Vol- II ,Page 11, CLAUSE 5.3	If for any reason the agency/firm or his authorized representative is not available and the work of recording measurements is suspended by the Engineer-in-Charge or his representative, the Engineer-in-Charge and the Client shall not entertain any claim from agency/firm for any loss or damages on this account. If the agency/firm or his authorized representative does not remain present at the time of such measurements after the agency/firm or his authorized representative has been given a notice in writing three (3) days in advance or fails to countersign or to record objection within a week from the date of the measurement, then such measurements recorded in his absence by the Engineer-in-Charge or his representative shall be deemed to be accepted by the agency/firm.	If for any reason the agency/firm or his authorized representative is not available and the work of recording measurements is suspended by the Engineer-in-Charge or his representative, the Engineer-in-Charge and the Client shall not entertain any claim from agency/firm for any loss or damages on this account. If the agency/firm or his authorized representative does not remain present at the time of such measurements after the agency/firm or his authorized representative has been given a notice in writing three (3) 5 days in advance or fails to countersign or to record objection within a week from the date of the measurement, then such measurements recorded in his absence by the Engineer-in-Charge or his representative shall be deemed to be accepted by the agency/firm.	No Change, Tender condition prevails.
40	Vol- II ,Page 14, CLAUSE 7 Payment on Intermediate Certificate to be Regarded as Advances		Request for Deletion	No Change, Tender condition prevails.
41	Vol- II ,Page 16, CLAUSE 9 Payment of Final Bill	No further claims shall be made by the agency/ firm after submission of the final bill and these shall be deemed to have been waived and extinguished.	Request for Deletion	No Change, Tender condition prevails.
42	Vol- II ,Page 16, CLAUSE 9 Payment of Final Bill	(i) If the Tendered value of work is upto Rs 15 lakhs : 3 months (ii) If the Tendered value of work exceeds Rs. 15 lakhs : 6 months	Change to 1 & 2 months respectively	No Change, Tender condition prevails.
43	Vol- II ,Page 17, CLAUSE 11-11.2 Deviations, Extra Items and Pricing	In the case of extra item (s) (items that are completely new, and are in addition to the items contained in the Contract), the agency/firm may within fifteen days of receipt of order or occurrence of the item(s) claim rates, supported by proper analysis, for the work and the Engineer-in-Charge/Client shall within one month of the receipt of the claims supported by analysis, after giving consideration to the analysis of the rates submitted by the agency/firm, determine the rates on the basis of the market rates and the agency/firm shall be paid in accordance with the rates so determined.	In all these clauses, The rates should be mutually decided by Engineer-in-charge and the agency/firm	No Change, Tender condition prevails.

44	Vol- II ,Page 18, CLAUSE 12	Foreclosure of contract due to Abandonment or Reduction in scope of Work	Clause not clear, need a revised understanding	This clause shows the terms for settlement, if the work fully or partially abandon.
45	Vol- II ,Page 19, CLAUSE 12	The reasonable amount of items on (i) and (iv) above shall not be in excess of 2% of the cost of the work remaining incomplete on the date of closure, i.e. total stipulated cost of the work as per accepted tender less the cost of work actually executed under the contract and less the cost of agency/firm's materials at site taken over by the Client/Government as per item (ii) above	There should not be any cap.	No Change, Tender condition prevails.
46	Vol- II ,Page 20, CLAUSE 13 Carrying out part work at risk & cost of agency/firm		Request for deletion	No Change, Tender condition prevails.
47	Vol- II ,Page 21, CLAUSE 14 (ii) (b) Suspension Of Work	If the total period of all such suspension in respect of an item or group of items or work for which a separate period of completion is specified in the contract exceeds thirty days, the agency/firm shall, in addition, be entitled to such compensation as the Engineer –in – Charge may consider in reasonable in respect of salaries and /or wages paid by the agency/firm to his employees and labour at site, remaining idle during the period of suspension, adding thereto 2% to cover indirect expenses of the agency/firm provided the agency/firm submit the claim supported by details to the Engineer – in – Charge within fifteen days of the expiry of the period of 30days	Request for Modification- If the total period of all such suspension in respect of an item or group of items or work for which a separate period of completion is specified in the contract exceeds thirty days, the agency/firm shall, in addition, be entitled to such compensation as the Engineer –in – Charge may consider in reasonable in respect of salaries and /or wages paid by the agency/firm to his employees and labour at site, remaining idle during the period of suspension, adding thereto 2%-10% to cover indirect expenses of the agency/firm provided the agency/firm submit the claim supported by details to the Engineer – in – Charge within fifteen days of the expiry of the period of 30days	No Change, Tender condition prevails.
48	Vol- II ,Page 21, CLAUSE 14 Suspension Of Work	In the event of the agency/firm treating the suspension as an abandonment of the contract by the Government, he shall have no claim to payment of any compensation on account of any profit or advantage which he might have derived from the execution of the work in full but which he could not derive in consequence of the abandonment.	Legal to suggest the language- There shall be no suspension of work for default attributable to the Bidder. Suspension of work for reasons other than default of the bidder, the bidder shall be paid dequate holding cost for the period of suspension. In the event the period of suspension is beyond 30 days, the bidder shall have the right to terminate the contract, also bidder shall be paid for all the goods delivered and services rendered, including adequate holding cost till the effective date of termination.	No Change, Tender condition prevails.

49	Vol- II ,Page 22, CLAUSE 15 last para Action in case Work not done as per Specifications	In such case the Engineer – in – Charge may not accept the item of work at the rates applicable under the contract but may accept such items at reduced rates as the authority specified in schedule 'F' may consider reasonable during the preparation of on account bills or final bill if the item is so acceptable without detriment to the safety and utility of the item and the structure or he may reject the work outright without any payment and /or get it and other connected and incidental items rectified, or removed and re – executed at the risk and the cost of the agency/firm. Decision of the Engineer – in – Charge to be conveyed in writing in respect of the same will be final and binding on the agency/firm.	Should be paid for the work executed.- In such case the Engineer – in – Charge may not accept the item of work at the rates applicable under the contract but may accept such items at reduced rates as the authority specified in schedule 'F' may consider reasonable during the preparation of on account bills or final bill if the item is so acceptable without detriment to the safety and utility of the item and the structure ~~or he may reject the work outright without any payment and /or get it and other connected and incidental items rectified, or removed and re – executed at the risk and the cost of the agency/firm~~. Decision of the Engineer – in – Charge to be conveyed in writing in respect of the same will be final and binding on the agency/firm.	No Change, Tender condition prevails.
50	Vol- II ,Page 25, CLAUSE 21 & 22 Settlement of Disputes & Arbitration	Refer tender document.	Legal to review- Notwithstanding anything to the contrary contained elsewhere, all disputes arising out of the contact shall be the subject matter of Arbitration as per the Arbitration and Conciliation Act, 1996, and rules made there under.	No Change, Tender condition prevails.
51	Vol- II ,Page 26, CLAUSE 25 (i) With-holding and lien in respect of sums due from agency/firm	For the purpose of this clause, where the agency/firm is a partnership firm or a limited company, the Engineer-in-Charge or the Government shall be entitled to withhold and also have a lien to retain towards such claimed amount or amounts in whole or in part from any sum found payable to any partner/limited company as the case may be, whether in his individual capacity or otherwise.	Request for Deletion	No Change, Tender condition prevails.
52	Vol- II ,Page 26, CLAUSE 25 (ii) With-holding and lien in respect of sums due from agency/firm	Provided that the Government shall not be entitled to recover any sum overpaid, nor the agency/firm shall be entitled to payment of any sum paid short where such payment has been agreed upon between the Engineer-in-Charge on the one hand and the agency/firm on the other under any term of the contract permitting payment for work after assessment by the Engineer-in-Charge.	Request for Deletion	No Change, Tender condition prevails.
53	Vol- II ,Page 27, CLAUSE 26 Lien in respect of claims in other Contracts		Request for Deletion	No Change, Tender condition prevails.
54	Vol- II ,Page 28, CLAUSE 29 Levy/Taxes payable by Agency/firm	Sales Tax/VAT (except Service Tax), or any other tax or Cess in respect of this contract shall be payable by the agency/firm and Government shall not entertain any claim whatsoever in this respect.	All taxes should be borne by the Client	No Change, Tender condition prevails.
55	Vol- II ,Page 29, CLAUSE 30 Conditions for reimbursement of levy/taxes if levied after receipt of tender	All tendered rates shall be inclusive of all taxes and levies (including service tax) payable under respective statutes.	Request for Modification- Should be exclusive of taxes	No Change, Tender condition prevails.

56	Vol- II ,Page 30, CLAUSE 32	If relative working Medical Education and Research Department, Government of Haryana/ HSCC then the agency/firm not allowed to tender	The definition of Near relative is too broad; impossibility of compliance. Request deletion. We undertake no conflict of interest in performance of obligations under this contract.	No Change, Tender condition prevails.
57	Vol- II ,Page 31, CLAUSE 36 Payment Terms		Hardware : 100% on delivery of equipment Application Software Implementation 20% after the preparation and acceptance by Client/HSCC of the detailed Design Document incorporating System Requirement Specifications 15% after the development of entire Application Software and its loading into the system 50% on implementation and acceptance of Application Software. 15% on completion of Training, Final Acceptance Test (FAT) and Go Live. Maintenance Support ; Quarterly Advance Payment	No Change, Tender condition prevails.
58	Vol- II ,Page 31, CLAUSE 36- A (ii) Payment Terms		Please change to 35% on installation & commissioning of the equipment.	No change, Tender condition prevails.
59	Vol- II ,Page 31, CLAUSE 36- A (iii) Payment Terms		Please change to 5% to be paid in 5 EMI at the end of each quarter from date of installation & commissioning of the equipment.	No change, Tender condition prevails.
60	Vol- II ,Page 31, CLAUSE 36 Payment Terms		Please make the payment terms flexible. Kindly provide some advance to mobilize resources.	No change, Tender condition prevails.
61	Vol-II, page no. 32, CLAUSE 37 Factory Inspection		We request you to please delete this clause as it may not be feasible to offer inspection at factory site of OEM being standard polices of most of the OEMs.	No change, Tender condition prevails.
Volume -III				
62	Vol- III ,Page 6, Sr. No- 8 Agency/firm's General Responsibilities	The successful agency/firm is bound to carry out any items of work necessary for the completion of the job even though such items are not included in the bill of quantities and rates instructions in respect of such additional items and their quantities will be issued in writing by the Consultant.	The rates should be decided by the agency/firm	No Change, Tender condition prevails.
63	Vol- III ,Page 10, Sr. No- 16	Obtaining Information's related to Execution of work	Request for Deletion	No Change, Tender condition prevails.
64	Vol- III ,Page 11, Sr. No- 20 Variations	Refer tender document	Aggregate of all variations to be capped at a maximum of 25% of the TCV.	No Change, Tender condition prevails.
65	Vol- III ,Page 12, Sr. No 20- (c)	Orders for variation to be in writing The agency/firm shall make no such variations without an order in writing by the Consultant, provided that no order in writing shall be required for increase up to 02% or decrease in the quantity of any work where such increase or decrease is not the result of an order given under this Clause, but is the result of the quantities exceeding or being less than those stated in the schedule of items.	To be deleted. All changes shall come under the subject matter of a change request mechanism.	No Change, Tender condition prevails.

66	Vol- III ,Page 12, Sr. No- 20 (b)	The Consultant Shall omit any component from scope of works that may be necessary and for that purpose or if for any other reason it shall, in his opinion be desirable and shall issue such instructions to the agency/firm. The agency/firm shall do the same without in any way vitiate or invalidate the contract. Any cost attributable to above shall be borne by the Agency/firm.	Delete as omission should be mutually decided	No Change, Tender condition prevails.
67	Vol- III ,Page 14, Sr. No- 25 Billing & Certification	Billing & Certification	There shall be no retention of any amount from the invoices raised.	No Change, Tender condition prevails.
68	Vol- III ,Page 22, Sr. No-36		Rate to be exclusive of taxes	No Change, Tender condition prevails.
69	Vol-III ,Page 22, Sr. No- 37	The contractor shall carry operation & maintenance of the entire system for one (01) year after satisfactory completion of entire work.	Is contract for O&M for 3 yrs or 1 yr ?	The Contract for O&M shall be for 3 years after completion of work. This Clause show that 1st year of O&M comes under DLP.
Others				
70			To be added- Include deemed Acceptance	No change in tender conditions.
71			To be added- Invoicing & Payment. Company will pay invoices within fifteen (15) days from the date of invoice, except for those portions of any invoice that the Company disputes in good faith and in writing. Firm may charge interest at the rate of 1.5% per month for delayed payments. Invoices shall be deemed to have been accepted if Company does not furnish a written objection specifying the nature of the dispute within five (5) days from the date of invoice.	No change in tender conditions.

Name of Project: Development of IT Infrastructure (HMIS, PACS, LAN, EMS, LMS & QMS) for Kalpana Chawla Govt. Medical College & Hospital, Karnal, Haryana

Tender No. : HSCC/KCGMC/IT/2015/01

Reply to Pre Bid Technical Queries raised by bidders during pre -bid meeting held on 20.03.2015 at HSCC's Corporate Office, Noida

	TECHNICAL (Volume - IV & V)		
S.No.	**Description/ Ref. / Clause no.**	**Bidders Queries**	**Reply**
1	Volume IV Page No 3	Bidders requested to provide exact number of Beds & no of users for HIS, Queue Management, EMS,PACS etc.	Number of beds – around 540 as mentioned in tender document. No of users to be estimated based on the details provided about Hospital infrastructure mentioned in the tender document (Department and Services at page no. 3 Volume-IV)
2	Volume IV Page 5, Scope of Work	To be deployed Data entry operator at Hospital Location in Karnal in General shift.	Data entry operator can be work on general shift. However, if any operator is required 24/7 during the time of implementation of HMIS or any other application, SI shall deploy operator accordingly
3	Volume IV Page 5, Scope of Work	Kindly indicate the Number of users to be trained? Is training expected to be followed by handholding for couple of weeks? Location & Hardware for training - Onsite? Any post training assessment expected?	No of users to be trained may be assessed based on no. of beds (around 540), No. of network points, no. of computers and other infrastructure details (Department and services) mentioned in the tender document page no.- 41, volume-IV. Post training assessment is not expected
4	Volume IV Page 7, Maintenance Support	Will KCGMC provide the requirement laptop/ desktops, printers, internet connectivity and communication facility to the onsite team?	During implementation period, all these resources shall be provided by the SI to the onsite team. During the

			maintenance period all these recourses and facilities shall be provided by the Client at site.
5	Volume IV Page 7, Maintenance Support	The SI shall be ready to make further customization / any changes in the code as the need may arise from time to time during the above said period, without any extra financial cost. **Request you to please define the SOW of changes.**	At this stage it is difficult to forecast the customization work which will be done after the implementation. However, after successfully implementation, minor customization shall be required.
6	Volume IV Page 7, Downtime penalty	suggested revised penalty : lower penalty of 2000 and 500 respectively. Penalty to be capped at mutually agreed limit of the monthly/quarterly value.	No change, Tender condition prevails.
7	Volume IV Page 7, XIV. Guaranteed uptime	As KCGMC hospital is expected to be operational round the clock (24x7, 365days), uptime of the applications and network becomes very critical and important aspect.\n\nIn order to ensure the availability, reliability, performance and scalability of the applications, hardware and software, we would like to suggest to consider virtualization solution which can ensure/ provide zero downtime, zero data loss and continuous availability for the applications running in virtual machines in the event of physical host failure, without the cost and complexity of traditional hardware or software clustering solutions.\n\nAlso provide high availability at infrastructure and application level. Live migration of VMS with no downtime from one cluster and virtualization management server to another with or without shared storage.	This is covered under SI/consortium's proposed solution. Bidders can provide it. bidder can quote higher or better features.

8	Volume IV Page 8 , Service and SLAs, Sr. No. 7	Centralized Help Desk service at each location- **Would the connectivity be provided by KCGMC or is to be factored by vendor.**	Internet, phone, space, electricity and related infrastructure shall be provided by the client. Requisite Software and Application Software etc. shall be provided by bidder.
9	Volume IV Page no. 9, XVI. Services & Service Level Requirements (13)	We understand that you are looking for Operation Management Services for hardware, software, networking etc. Request you to consider Operations management solution even for Virtualization infrastructure as it will provide o Real-time insight into infrastructure behaviour, upcoming problems, and opportunities for efficiency improvements and capability to automatically analyse monitoring data to be expressed as health, risk and efficiency measures that enable IT to detect potential issues in the environment more easily o Infrastructure and operations analytics to eliminate time-consuming problem resolution processes through automated root cause analysis and capacity analytics which helps to provide "What If" scenarios to eliminate the need for spread sheets, scripts and rules of thumb o Self-learning performance analytics and dynamic thresholds which can adapt to the environment to simplify operations management and eliminate false alerts. o Integrated smart alerts for health, performance and capacity degradation to identify building performance	This is covered under SI/consortium's proposed solution. Bidders can provide it. Bidder can quote higher or better features.

problems before they affect end users

o Advanced capacity analytics to allow administrators to optimize VM density and identify capacity shortfalls before they affect end users along with the capacity analytics which can identify over-provisioned resources so they can be right-sized for most efficient use of virtualized resources.

10	Volume IV (HMIS Modules) Page no. 16	Bidder requested to remove Inventory Control, Laundry Department, Equipment Management System, Machinery & Equipment Management, Planned Preventive Maintenance & Online Duty Roaster from HMIS Module as they do not consider it as part of HMIS Module.	No change, Tender condition prevails.
11	Volume-IV, page no. 27 (System and Technical requirement)	Is Lab Equipment interface part of current scope? If Yes, please provide the list of Lab Equipment to be interfaced.	No. of lab equipment can be estimated as per the industry standard and details mentioned in Department and Services at page no. 3 Volume-IV.
12	Volume IV Page 41,Training	if additional session is required for any existing user or new staffs joining the organization (KCGMC), then separate training program shall be organized without any extra charges.- **Minimum batch size and maximum number of additional trainings to be done need to be mutually discussed and decided.**	As per tender terms, training plan is to be prepared by SI/Consortium. However during preparation of training plan, discussion to be held with client/HSCC for their requirements i.e. batch size etc.
13	Volume IV, Annexure-C (Page no.84-88 for Networking Switches)	Query from bidder is "Alternatively the core switch support scalability for additional 6 ports of 40G QSFP for the future expansion by Ethernet fabric or virtual chassis? Why it has to be on same hardware ?"	Amended, Refer Sr. No. 4 at Annexure - A enclosed.
14		Shall support 100Gbps interface ready from Day-1.	No change, Tender condition prevails. Bidder can quote higher or better features.
15		Shall support virtualization of hardware resource configuring into multiple logical devices.	No change, Tender condition prevails. Bidder can quote higher or better features.

16		For 48 x 10G + 6 x 40G the bandwidth required is 1.44 Tbps and 1.08 Bpps. The switching performance number does not match interface speed.	Amended, Refer Sr. No. 5 at Annexure - A enclosed.
17		Distribution Switch/Chassis configured in an Active-Active mode with support for Virtual Port Channel (VPC) or equivalent virtualization of multiple switch chassis as logical single device.	No change, Tender condition prevails. Bidder can quote higher or better features.
18		Query from bidder is "Request to relax BGP protocol in the core switch.	Amended, Refer Sr. No. 6 at Annexure -A enclosed.
19		Query from bidder is "The port density of each distribution could be met with virtual chassis as point 8 allows - Switch should support scalability of upto 30 port of 10G SFP+ in standalone or virtual chassis mode.	Amended, Refer Sr. No. 7 at Annexure - A enclosed.
20		Should be 448 Gbps or more as 500 Gbps or more is favouring a single OEM.	Amended, Refer Sr. No. 8 at Annexure - A enclosed.
21		Query from bidder is "wire-speed packet forwarding of 330 Mbps or more is favouring a single OEM.	Amended, Refer Sr. No. 9 at Annexure - A enclosed.
22		Request to kindly consider IGMP Snooping as standard Layer 2 switch feature for the IPv4 multicast in 24 Port access switch, 48 port access switch and 24 Port POE+ access switch.	No change, Tender condition prevails. Bidder can quote higher or better features.
23		To remove Clause "The Access Switch should be upgradable to support advance Layer 3 features like, RIPv1/v2, OSPFv2 and VRRP." From 24 Port access switch, 48 port access switch and 24 Port POE+ access switch.	Amended, Refer Sr. No. 10 at Annexure - A enclosed.
24	Volume IV Page 89 Sr. No. 13 of Wireless Access Point	To remove Clause "Access point should have console port."	Amended. Refer to Sr. No. 11 at Annexure -A enclosed.
25	Volume IV Page 89 Sr. No. 16 of Wireless Access Point	To remove Clause "AP model proposed must be able to be both a client-serving AP and a monitor-only AP for Intrusion Prevention services".	Amended. Refer to Sr. No. 12 at Annexure -A enclosed.

26	Volume IV page 90 Sr. no. 1.00 of Wireless Access Controller	The proposed architecture should be based on centralized controller with **thin/thick AP** deployment. AP's should download OS and configuration from controller. Switch/Controller for improved security.	Amended. Refer to Sr. No. 13 at Annexure -A enclosed.
27	Volume IV page 90 Sr. no. 3.00 of Wireless Access Controller	To remove Clause "The controller should have minimum of 2x10/100/1000 Base-T and minimum 2 x 10GE SFP+ port for connecting to LAN."	No change, Tender condition prevails.
28	Volume IV page 90 Sr. no. 4.00 of Wireless Access Controller	To remove Clause "Controller should have at least 20 GBPS of throughput."	No change, Tender condition prevails.
29	Volume IV page 90 Sr. no. 6.00 of Wireless Access Controller	To remove Clause "The controller should support dual hot swappable internal power supply."	No change, Tender condition prevails.
30	Volume IV page 90 Sr. no. 7.00 of Wireless Access Controller	To remove Clause "Controller should have dual firmware storage."	No change, Tender condition prevails.
31	Volume IV page 90 Sr. no. 8.00 of Wireless Access Controller	Bidder request to kindly consider **10k** concurrent client device support in controller understanding the required AP deployment with 2x future scalability.	Amended. Refer to Sr. No. 14 at Annexure -A enclosed.
32	Volume IV page 90 Sr. no. 9.00 of Wireless Access Controller	Redundancy Features: Active: Standby; Active: Active and 1: Many redundancy. Licenses of each Wireless switch/Controller should be aggregated so that all the licenses are usable.	Amended. Refer to Sr. No. 15 at Annexure -A enclosed.
33	Volume IV page 90 Sr. no. 11.00 of Wireless Access Controller	kindly remove MS lync as this is vendor specific.	Amended. Refer to Sr. No. 16 at Annexure -A enclosed.
34	Volume IV page 90 Sr. no. 12.00 of Wireless Access Controller	kindly change it to "Rules for access rights should be based on any one combination of time, location, user identity and device identity".	No change, Tender condition prevails.
35	Volume IV page 90 Sr. no. 19.00 of Wireless Access Controller	Controller should be EAL-4 **or Protection Profile for Wireless Local Area Network certified or Common Criteria Certified.**	Amended. Refer to Sr. No. 17 at Annexure -A enclosed.
36	Volume IV page 90 Sr. no. 21.00 of Wireless Access Controller	To remove Clause "Advance WIDS/WIPS should able to detect advance attacks i.e. spoofed MAC address detection, Authentication attack, Valid SSID misuse, EAP	No change, Tender condition prevails.

		handshake Flood attacks etc."	
37	Volume IV page 91 Sr. no. 22.00 of Wireless Access Controller	To remove Clause "Advance WIDS/WIPS should detect & prevent an Ad-hoc connection (i.e. clients forming a network amongst themselves without an AP) as well as windows bridge (client that is associated to AP is also connected to wired network and enabled bridging between two interfaces)".	No change, Tender condition prevails.
38	Volume IV page 91 Sr. no. 25.00 of Wireless Access Controller	To remove Clause "The WIPS solution should detect and protect if a client probe-request frame will be answered by a probe response containing a null SSID to crash or lock up the firmware of any 802.11 NIC."	No change, Tender condition prevails.
39	Volume IV page 91 Sr. no. 27.00 of Wireless Access Controller	To remove Clause "The WIPS solution should detect and protect if a client/tool keep on sending disassociation frames to the broadcast address (FF:FF:FF:FF:FF:FF) disconnect all stations on a network for a widespread DoS."	No change, Tender condition prevails.
40	Volume IV page 91 Sr. no. 31.00 of Wireless Access Controller	When client radio is in sleep mode to save battery and AP then begins buffering traffic bound for that client until it indicates that it is awake. The WIPS solution should detect and protect if intruder try sending spoofed frames to the AP on behalf of the original client to trick the AP into believing the client is asleep to buffer the AP beyond limit **or equivalent security feature. Request to kindly consider equivalent security feature.**	Amended. Refer to Sr. No. 18 at Annexure -A enclosed.
41	Volume IV Page 97 and 131, Sr. No. 2 in Server Hardware Configuration for Network	Please change the CPU to E5-2609 v3 to make in iline with latest generation CPU offering. E5-2609 v3 is 1.9 GHz, 6 core, 15 MB CPU.	Amended. Refer to Sr. No. 19 at Annexure -A enclosed.
42	Volume IV Page 98 and 131, Sr. No. 7 in Server Hardware Configuration for Network	Please clarify what is meant by advanced key.	Hot plug drives with support to RAID 1, 5, 6.

43	Volume IV Page 98 and 131, Sr. No. 11. in Server Hardware Configuration for Network	OEM uses USB port for the keyboard and mouse connectivity. Request you to please remove PS2.	Amended. Refer to Sr. No. 20 at Annexure -A enclosed.
44	Volume IV Page no 99	Suggested -- Screen: Overall pair enclosed in laminated Aluminium foil with drain wire".	Amended. Refer to Sr. No. 21 at Annexure -A enclosed.
45	Volume IV Page 145, Sr. No. 14 for Chassis.	Some OEM term the Blade interconnect as module instead of switch as it is the module being plugged to chassis not as a standalone product. Request you to please modify the clause as follows for more participation "The Chassis should have redundant 10GbE network switches / module with at least 14Nos x 10GbE downlink ports and at least 2 x 10GbE & 2 x 1GbE uplink ports per switch for connecting to the Core Switch with end to end support for FCOE and redundant 20 or more ports fiber channel SAN switch / module with at least 14Nos x 8Gbps auto negotiating FC downlink ports and 4Nos x 8Gbps uplink ports per SAN switch with necessary required cables"	Amended. Refer to Sr. No. 22 at Annexure -A enclosed.
46	Volume IV Page 146, Sr. No. 1 for VM SERVER	Please change the CPU to E5-2680 v3 to make in iline with latest generation CPU offering. E5-2680 v3 is 2.5 GHz, 12 core CPU.	Amended. Refer to Sr. No. 23 at Annexure -A enclosed.
47	Volume IV Page 146, Sr. No. 3 for VM SERVER	Current clause is restrictive in nature. Request you to please change the slots from 24 to 16.	Amended. Refer to Sr. No. 24 at Annexure -A enclosed.
48	Volume IV Page 147, Sr. No. 15 for VM SERVER	Please clarify what is meant by life cycle management.	Agent less management with advance management compatibilities to maintain the entire life cycle from basic installation, diagnosis of the machine, to patch management to performance analysis and rectification of errors.
49	Volume IV Page 147, Sr. No. 12 of VM SERVER	We understand that you are looking to use the virtualization software on all the x86 servers. Request to define the same.	This is covered under SI/consortium's proposed solution. Bidders can provide it. Bidder can quote higher or better features.

		Kindly define / elaborate key functionalities & expectation from the virtualization Software & provide specifications.	
50	Volume IV Page 148, Sr. No. 1 for BACKUP SERVER	Please change the "One Intel E5 2620 V2 2.1 Ghz 6 cores or above." to make in iline with latest generation CPU offering.	Amended. Refer to Sr. No. 25 at Annexure -A enclosed.
51	Volume IV Page 148, Sr. No. 3 for BACKUP SERVER	Current clause is restrictive in nature. Request you to please change the slots from 24 to 16.	Amended. Refer to Sr. No. 26 at Annexure -A enclosed.
52	Volume IV Page 150, Sr. No. 6 for ENTERPRISE STORAGE	Bidder requested to change clause "Front End Connectivity- The storage should support minimum of 8*8 Gbps FC or higher SAS Storage front end ports as well as an additional 2 *10 Gbps ISCSI ports for Replication." to "Front End Connectivity- The storage should support minimum of 8*8 Gbps FC or higher SAS Storage front end ports as well as an additional 2 *1/10 Gbps ISCSI/IP ports for Replication."	Amended. Refer to Sr. No. 27 at Annexure -A enclosed.
53	Volume IV Page 150, Sr. No. 9 for ENTERPRISE STORAGE	The storage should be scalable to at least 240 drives.	No change, Tender condition prevails.
54	Volume IV Page 152, Sr. No. 19 in ENTERPRISE STORAGE	Bidder requested to change clause from "There should not be any additional appliance required for Replication. Storage Array should have iSCSI ports for replication to DRs site." to "There should not be any additional appliance required for replication. Storage Array should have iSCSI/ IP ports for replication to DRs site."	Amended. Refer to Sr. No. 28 at Annexure -A enclosed.
55	Volume IV Page No 154 Annexure H-List of Approved makes	Bidders requested to add an additional OEM in list of approved makes for Passive devices for LAN, Desktop computer & notebook PC, Tablet, printers & scanners.	No change, Tender condition prevails.
56	Volume V BOQ (PART –A) – II, Sr. No.8.1-8.9	Cable can be supplied in box of 305 mtrs.	If U/FTP Cat-6A is available in box of 305 meters, bidder can supply.

57	Volume V BOQ (PART –A) – II, Sr. No.9.1-9.8	Should opt for LC interface instead of SC. Patch cord should be LC-LC type. Why OS1 cable when OS2 cable is available.	No change, Tender condition prevails. Bidder can quote higher or better features.
58	Volume V BOQ (PART –A) – II, Sr. No.10.1	27 U cannot be wall mount. Largest size available I wall mount is 15U.	Amended. Refer to Sr. No. 2 at Annexure -A enclosed.

Please note that this Amendment no. – I with Annexure -A, shall form part of the tender and all others terms & conditions of the tender shall remain unchanged.

Prospective bidders are advised to regularly scan through HSCC e-tender portal http://www.tenderwizard.com/HSCC as corrigendum/amendments etc., if any, will be notified on this portal only and separate advertisement will not be made for this.

Deputy General Manager (System), HSCC (I) Ltd.
For & on Behalf of DGMER, Panchkula

Annexure-A

Name of Project: Development of IT Infrastructure (HMIS, PACS, LAN, EMS, LMS & QMS) for Kalpana Chawla Govt. Medical College & Hospital, Karnal, Haryana

AMENDMENTS

For IT work:

S. No.	Reference	As per Tender Document	Amendments
1	Volume I Page 15 Sr. No. 2.6	The entire IT Work shall be divided into two phases as per the expected readiness of the site:- PHASE – I - Hospital Block and OPD Block - Site hand over at the time of commencement of work. PHASE – II - Teaching Block, Auditorium, Girls Hostel and Boys Hostel (1 no. each) - Site hand over in February 2016.	The entire IT Work shall be divided into two phases as per the expected readiness of the site:- PHASE – I - Hospital Block and OPD Block - Site hand over at the time of commencement of work. - Completion period - 8 months. PHASE – II - Teaching Block, Auditorium, Girls Hostel and Boys Hostel (1 no. each) - Site hand over in February 2016. - Completion period - 4 months.
2	Volume V BOQ (PART –A) – II, Sr. No.10.1	Supply, installation, testing and Commissioning of 19" Rack 27 U Wall Mount Rack with all standard accessories that include Cable Manager, Power Bar with sockets etc. as per the requirement &	Supply, installation, testing and Commissioning of 19" Rack 27 U **Wall/Floor** **Mount** Rack with all standard accessories that include Cable Manager, Power Bar with sockets etc. as per the requirement &

		complete in all respect and as directed to the satisfaction of engineer.	complete in all respect and as directed to the satisfaction of engineer.
3	Volume IV, Page no. 47,48,142,154	UTP	Read "U**/F**TP" in place of "UTP"
4	Volume IV page 84 Sr. no. 6.00 of Core Switch	Each Core Switch should have 6 x 40G QSFP ports for Inter-core switch connectivity and should support scalability for additional 6 ports of 40G QSFP for the future expansion on same hardware.	Each Core Switch should have 6 x 40G QSFP ports for Inter-core switch connectivity and should support scalability for additional 6 ports of 40G QSFP for the future expansion **with Ethernet fabric or virtual chassis or** on same hardware.
5	Volume IV page 84 Sr. no 10.00 of Core Switch	Core Switch should have minimum switching capacity of 1.9 Tbps and minimum forwarding capacity of 1.4 Bpps or more for both IPv4 and IPv6.	Core Switch should have minimum switching capacity of **1.44 Tbps** and minimum forwarding capacity of **1.08 Bpps** or more for both IPv4 and IPv6.
6	Volume IV page 84 Sr. no 13.00 of Core Switch	The Core Switches should support full Layer 3 features like PIM-DM/SM, RIPv1/v2, OSPF, BGP, VRRP and PBR from day 1.	The Core Switches should support full Layer 3 features like PIM-DM/SM, RIPv1/v2, OSPF, VRRP and PBR from day 1. It should be **upgradable to support BGP feature in future**.
7	Volume IV page 85 Sr. no 3.00 of Distribution Switch	Each Layer 3 Switch should have min 24 x 10/100/1000 Mbps RJ45 ports and 8 ports of 10G SFP+ fibre	Each Layer 3 Switch should have min 24 x 10/100/1000 Mbps RJ45 ports and 8 ports of 10G SFP+ fibre **in standalone or virtual chassis mode**.
8	Volume IV page 85 Sr. no 5.00 of Distribution Switch	The Layer 3 Switch should provide Non-Blocking switch fabric capacity of 500 Gbps or more.	The Layer 3 Switch should provide Non-Blocking switch fabric capacity of **448** Gbps or more.
9	Volume IV page 85 Sr. no 6.00 of Distribution Switch	The Layer 3 Switch should provide wire-speed packet forwarding of 380 Mbps or more.	The Layer 3 Switch should provide wire-speed packet forwarding of **330** Mbps or more.
10	Volume IV, Page 86, 87 and 88 Sr. no 8.00 of each, 24 Port Access Switch, 48 Port Access Switch and 24 Port POE+ Access Switch	The Access Switch should be upgradable to support advance Layer 3 features like, RIPv1/v2, OSPFv2 and VRRP.	Removed

		respectively	
11	Volume IV Page 89 Sr. No. 13 of Wireless Access Point	Access point should have console port.	Removed.
12	Volume IV Page 89 Sr. No. 16 of Wireless Access Point	AP model proposed must be able to be both a client-serving AP and a monitor-only AP for Intrusion Prevention services	Removed.
13	Volume IV page 90 Sr. no. 1.00 of Wireless Access Controller	The proposed architecture should be based on centralized controller with thin AP deployment. AP's should download OS and configuration from controller. Switch/Controller for improved security.	The proposed architecture should be based on centralized controller with **thin/thick** AP deployment. AP's should download OS and configuration from controller. Switch/Controller for improved security.
14	Volume IV page 90 Sr. no. 8.00 of Wireless Access Controller	Controller should have capacity to handle minimum 12000 or more concurrent devices.	Controller should have capacity to handle minimum **10000** or more concurrent devices or client.
15	Volume IV page 90 Sr. no. 9.00 of Wireless Access Controller	Redundancy Features: Active: Standby; Active: Active and 1: Many redundancy. Licenses of each Wireless switch/Controller should be aggregated so that all the licenses are usable.	Redundancy Features: controller should support hardware redundancy
16	Volume IV page 90 Sr. no. 11.00 of Wireless Access	The controller should support advance QOS either as an integrated feature or through add-on components to implement role based access for data, voice and video applications. It should support session prioritization as well like Voice, Video, Data **of MS Lync should get different QOS.**	The controller should support advance QOS either as an integrated feature or through add-on components to implement role based access for data, voice and video applications. It should support session prioritization as well like Voice, Video, Data.
17	Volume IV page 90 Sr. no. 19.00 of Wireless Access Controller	Controller should be EAL-4 certified.	Controller should be EAL-4 **or Protection Profile for Wireless Local Area Network certified or Common Criteria Certified**
18	Volume IV page 91 Sr. no. 31.00 of Wireless Access Controller	When client radio is in sleep mode to save battery and AP then begins buffering traffic bound for that client until it indicates that it is awake. The WIPS solution should detect and protect if intruder try sending spoofed frames to the AP on behalf of the	When client radio is in sleep mode to save battery and AP then begins buffering traffic bound for that client until it indicates that it is awake. The WIPS solution should detect and protect if intruder try sending spoofed frames to the AP on

		original client to trick the AP into believing the client is asleep to buffer the AP beyond limit.	behalf of the original client to trick the AP into believing the client is asleep to buffer the AP beyond limit **or equivalent security feature.**
19	Volume IV Page 97 and 131, Sr. No. 2 in Server Hardware Configuration	Intel Xeon Processor E5-2420 (1.9 GHz/6-core/95W/15MB) or Superior	Intel Xeon **E5-2609 v3** is 1.9 GHz, 6 core, 15 MB CPU or Superior
20	Volume IV Page 98 and 131, Sr. No. 11. in each for Server Hardware Configuration	OEM standard keyboard and mouse **(PS2)**	OEM standard keyboard and mouse
21	Volume IV Page 99 In mechanical characteristics of U/FTP CAT 6A shielded twisted pair wire.	**Screen:** Each individual pair enclosed in laminated aluminium foil.	**Screen:** Each individual pair enclosed in laminated aluminium foil **with drain wire**.
22	Volume IV Page 145, Sr. No. 14 in Chassis.	The Chassis should have redundant 10GbE network switches with at least 14Nos x 10GbE downlink ports and at least 2 x 10GbE & 2 x 1GbE uplink ports per switch for connecting to the Core Switch with end to end support for FCOE and redundant 20 or more ports fiber channel SAN switch with at least 14Nos x 8Gbps auto negotiating FC downlink ports and 4Nos x 8Gbps uplink ports per SAN switch with necessary required cables	The Chassis should have redundant 10GbE network **switches / module** with at least 14Nos x 10GbE downlink ports and at least 2 x 10GbE & 2 x 1GbE uplink ports per switch for connecting to the Core Switch with end to end support for FCOE and redundant 20 or more ports fiber channel SAN **switch / module** with at least 14Nos x 8Gbps auto negotiating FC downlink ports and 4Nos x 8Gbps uplink ports per SAN switch with necessary required cables
23	Volume IV Page 146, Sr. No. 1 in VM SERVER	Two Intel E5-2695 V2 2.4 Ghz 12 cores or above	two Intel **E5-2680 V3 2.5 Ghz**, 12 Cores or above
24	Volume IV Page 146, Sr. No. 3 in VM SERVER	256GB DDR3 Memory / 24 Slots , scalability upto 768GB	256GB DDR3 Memory / **16 Slots** or higher, scalability upto 768GB
25	Volume IV Page 148, Sr. No. 1 in BACKUP SERVER	One Intel E5 2620 V2 2.1 Ghz 6 cores or above	One Intel **E5-2620 V3 2.4 Ghz**, 6 Cores or above
26	Volume IV Page 148, Sr. No. 3 in BACKUP SERVER	32 GB DDR3 Memory / 24 Slots , scalability upto 768GB	32 GB DDR3 Memory / **16 Slots** or higher, scalability upto 768GB
27	Volume IV Page 150, Sr. No.	Front End Connectivity- The storage should support	Front End Connectivity- The storage should

	6 in ENTERPRISE STORAGE	minimum of 8*8 Gbps FC or higher SAS Storage front end ports as well as an additional 2 *10 Gbps ISCSI ports for Replication.	support minimum of 8*8 Gbps FC or higher SAS Storage front end ports as well as an additional **2 *1/10 Gbps ISCSI/IP ports** for Replication.
28	Volume IV Page 152, Sr. No. 19 in ENTERPRISE STORAGE	Replication • There should not be any additional appliance required for Replication. Storage Array should have iSCSI ports for replication to DRs site.	Replication • There should not be any additional appliance required for replication. Storage Array should have **iSCSI/ IP ports** for replication to DRs site.