ERNET's Response to the Vendors Queries for the tender for Supply, Installation, Commissioning & Integration of network equipment (active / passive) for establishing Wi-Fi enabled Campus Area Network at Clients site. – reg.

S.No.	Clause No.	Description of the Clause	Queries from Vendors/OEMs.	ERNET's Clarification /
			<b>C 1 1 1 1 1 1 1 1 1 1</b>	Reply
1.	Clause No. 10,	Bidder should have the experience of	Query-1	Explanation of the clause:
	, , , , , , , , , , , , , , , , , , , ,	successfully executing similar projects		"The term 'wireless' used in the
	Eligibility	in last 5 financial years and must	implementation of Wi-Fi enabled Campus	definition of similar work
	Criteria,	enclose relevant copies of the customer	Area Networks for the period of 24 Months (2	means 'Wi-fi'."
	(a) For Bidders,	purchase orders along with scope of	years) and order value upto 30 Cr. In multiple	
		work, deliverables, time period of	orders as per requirements from universities /	
	Point No. (iii)	execution, project value and	institutes/ organization. We request ERNET	
		satisfactory work completion certificate	to relax executed purchase order value clause	
		from client for at-least one similar	as it will restrict prospective Sis and limit	
		project of value not less than Rs. 24 Cr.	competitive bids only from large service	
		or Two similar projects of value not	providers.	
		less than Rs. 12 Cr. each or Three		
		similar projects of value not less than	Query-2	
		Rs. 9 Cr. each. Copy of purchase orders	It's clearly defined that total amount of work	
		should be submitted as a proof.	is 30 cr with an upside of 20% i.e. total value	
		Definition of similar month/ musicate	is restricted up to 36 cr. Now since ERNET	
		Definition of similar work/ project: Supply, Installation &	intends to empanel maximum three vendors	
		Supply, Installation & Commissioning of IT Infrastructure	and this empanelment is for two years. In this scenario total work allotted for each bidder	
		consisting of LAN/WAN/CAN/	comes out to be 5cr. It is suggested that	
		wireless networks executed in last	similar project value of single order should	
		five years in India.	not be more than 3 Cr as 24 Cr value for	
		iive years in marai	single project is on higher side.	
			single project is on inglier state.	
			Query-3	
			We are registered ERNET vendor and	
			interested to participate. We are looking	
			forward for ERNET to give relaxation as 2	
			Cr. Rupees executed order and allow	
			registered vendors to participate instead of	

			such project values.	
			buon project values.	
			Query-4	
			We would request to amend the clause as	
			Bidder should have the experience of	
			successfully executing similar projects in last	
			10 financial years and must enclose relevant	
			copies of the customer purchase orders along	
			with scope of work, deliverables, time period	
			of execution, project value and satisfactory	
			work completion certificate from client for at-	
			least one similar project value not less than	
			Rs. 24 Cr. Or two similar projects of value not	
			less than Rs. 12 Cr. each or Three similar	
			projects of value not less than Rs. 9 Cr. each.	
			Copy of purchase orders should be submitted	
			as a proof. By putting such clause this is	
			restricting prospective bidder to participate in	
			your valuable tender, we would request to	
			amend the clause for maximum and	
			competitive participation.	
			0	
			Query-5	
			More clarification required specially on	
			highlighted wireless networks in terms of experience.	
2.	Clause No. 10,	The bidder should have annual average	Query-1	No Change
4.	Eligibility	turnover of Rs. 45 Crores in below	The bidder should have annual average	110 Change
	Criteria,	mentioned three financial years. The	turnover of Rs. 100 Crores in below	
	(a)For Bidders	Bidder should be profit making	mentioned three financial years. The Bidder	
	Point No. (ix)	company in any one of the last three	should be profit making company in any one	
	, ,	financial years. The bidder must also	of the last three financial years. The bidder	
		have positive net worth as of 31st	must also have positive net worth as of 31st	
		March 2016. Attested audited copies of	March 2016. Attested audited copies of the	
		the bidders" annual reports for the years	bidders" annual reports for the years 2013-14,	

r	1	,		
		2013-14, 2014-15 and 2015-16 have to	2014-15 and 2015-16 have to be attached	
		be attached along with a certificate	along with a certificate from a practicing	
		from a practicing Charted Accountant	Charted Accountant on his letter head	
		on his letter head confirming annual	confirming annual turnover, net profit,	
		turnover, net profit, positive net	positive net worth& average annual turnover	
		worth& average annual turnover during	during each of these years.	
		each of these years.	Considering the project sustenance of 3 yrs	
			warranty and another 2 years of extended	
			AMC, we would request that the turnover	
			should be made more sound and profitability	
			for last 3 years should be considered assuring	
			ERNET that firms with sound financial	
			strength would participate for smoother	
			execution and maintenance of the project.	
			1 3	
			Query-2	
			It is requested to restricts annual average	
			turnover to 10 Cr as total work per bidders is	
			not more than 5 Cr per annum	
			-	
			Query-3	
			The Bidder should be profit making company	
			in any one of the last three financial years.	
			The bidder must also have positive net worth	
			in any one of the last three financial year as	
			on 31st March 2016 because Profit and	
			Positive net worth belong to each other so	
			clause should be same for profit and net worth	
			for both.	
3.	Clause No. 10,	The bidder must enclose copy of LAN/	Query-1	No Change
	Eligibility	/ Network work order(s) of laying of	The bidder must enclose copy of LAN/	
	Criteria,	minimum 5 Kms of Fibre optical cable	WAN/MAN work order(s) having installed	
	(a)For Bidders	with at least 100 Fibre Terminations	500 access point / Switches. The bidder	
	(iv)	and 500 UTP nodes in any of the last	should have technical competency of	
		five years in India.	providing LAN / WAN / MAN solution	

			1	
			having expertise of wired / wireless solution	
			deployment.	
			Query-2	
			It is requested to change	
			"LAN/WAN/Network work order (s) of	
			laying of minimum 50 Kms of fibre optical	
			cable with at least 500 Fiber Terminations	
			and 500 UTP nodes in any of the last five	
			years of in India	
4.	Clause No. 10,	For smooth, seamless and easy	Query-1	No Change
	Eligibility	manageability, operation,	For smooth, seamless and easy manageability,	
	Criteria,	interoperability and maintenance, the	operation, interoperability and maintenance,	
	(a)For Bidders	bidder should offer/quote all the	the bidder should offer/quote all the switches	
		switches (Core Switches, & Access	and wireless (Core Switches, & Access	
	Point No. (xx)	Switches) of the same make (OEM) and	Points)of the same make (OEM)and must be	
		must be managed by the same NMS	managed by the same NMS offered/ quated.	
		offered/quoted.	Since the campus network is to be deployed	
		offered/quoted.	1	
			in its entirety including wired and wireless it	
			is imperative that both wired and wireless	
			LAN are from the same OEM, therefore	
			reducing operation cost and implementation	
			simplicity.	
			Query-2	
			For smooth, seamless and easy manageability,	
			operation, interoperability and maintenance,	
			the bidder should offer/quote all the switches	
			and wireless (Core Switches, & Access	
			Points) of the same make (OEM) and must be	
			· · · · · · · · · · · · · · · · · · ·	
			managed by the same NMS offered/ quated.	
			Since the campus network is to be deployed	
			in its entirety including wired and wireless it	
			is imperative that both wired and wireless	
			LAN are from the same OEM, therefore	
			reducing operation cost and implementation	

			simplicity.	
5.	Clause No. 10,	The OEM(s) of networking &Wireless	Query-1	No Change
	Eligibility	equipment being quoted/offered in the	Recommended to change. The OEM(s) of	
	Criteria,	tender should have an installed base in	networking & Wireless equipment being	
	(b) For	India and should have at least one	quoted/offered in the tender should have an	
	OEM(s)/Manufa	installation of its networking equipment	installed base in India and should have at least	
	cturer(s)	(with minimum 1000 ports on data	one installation of its networking equipment	
		network switches and at least one	(with minimum 500 ports on data network	
	Point No. (ii)	chassis based layer 3 switch) & and	switches and at least one chassis based layer 3	
		Wireless (minimum 500 Access Points	switch) & and Wireless (minimum 250	
		with Wireless LAN Controller) in	Access Points with Wireless LAN Controller)	
		India.	in India. Relevant documentary proof should	
		Relevant documentary proof should be	be submitted. OEM for WLAN equipment	
		submitted. OEM for WLAN equipment	should have installed base of at least 1000	
		should have installed base of at least	Wi-Fi access points in India. Relevant	
		10000 Wi-fi access points in India.	Documentary proof should be submitted.	
		Relevant Documentary proof should be	OEM of passive components should have at	
		submitted. OEM of passive components	least one installation with at least 100 fiber	
		should have at least one installations	terminations and 500 UTP nodes. Relevant	
		with at least 100 fiber terminations and	documentary proofs should be submitted.	
		2000 UTP nodes. Relevant	0 2	
		documentary proofs should be	Query-2	
		submitted.	We understand from this clause that a	
			separate PO is required for networking	
			equipment (Switch) and a separate PO is	
			required for wireless. Please clarify if the understanding is correct.	
			understanding is correct.	
			Query-3	
			We have installed 350 access points as an	
			experience instead of 500 access points as an	
			this this be consider for an experience.	
			uns uns de consider for all experience.	

6.	Clause No. 10,	OEM should authorize maximum of	Query-1	No Change
0.	Eligibility	two bidders only. The Bids received	This clause is limiting the OEM participation	140 Change
	Criteria,	with a single OEM from more than two	across multiple bidders. Due to this clause,	
	(b)For OEM(s)/	bidders would lead to rejection of all	Technically qualified & financially viable	
	Manufacturer(s)	bids of that particular OEM. An	OEM solution would not be bid by the system	
	Translation (B)	Undertaking from OEM to this effect	integrators, which will further impact the	
	Point (iv)	should be submitted.	overall project in terms of commercials and	
	1 01111 (11)	Shourd be submitted.	participation. Hence we would request	
			ERNET to kindly delete this clause.	
	Clause No. 10,	Additional Point	Query-1	Not accepted
	Eligibility		There has been some recent acquisitions on	•
	Criteria,		some of the OEM space and some large	
	(b) For OEM(s)		OEM's have acquired to written the	
			commitment to the end customer/ERNET, the	
			acquirer /purchaser OEM should give	
			certificate for incessant services to ERNET	
			and so that the customer gets an uninterrupted	
			services for the project.	
7.	Clause No. 13,	Each bid must be accompanied by	Query-1	No Change
	EARNEST	Earnest Money Deposit (EMD) of	We want to bring into your kind notice that	
	MONEY	Rs.30, 00,000/- (Rupees Thirty lakhs	firms registered with the National Small	
	DEPOSIT	only) shall be in the form of Demand	Industries Corporation (NSIC) are exempted	
		Draft/Pay Order/EM Fixed	from payment of EMD & Tender Document	
	Point No. (i)	deposit/Bank Guarantee of any	Fee. We request you to relax tender	
		Nationalized/Scheduled commercial	Document Fee & EMD Submission clause as	
		Bank taken in the name of ERNET	per NSIC guidelines & accept the NSIC	
		India, New Delhi. Bank Guarantee	registration certification.	
		should be valid minimum for a period		
		of 180 days from due date of the bid &	Query-2	
		be submitted in compliance with the	1 * *	
		clause no. 25 (xiv). The Performa for	5 Lakhs.	
		bid submission of BG is enclosed at		
		annexure – III B. Bids received without	Query-3	
		Earnest Money Deposit or not	· · · · · · · · · · · · · · · · · · ·	
		confirming to the above and /or with	clause as we are registered with NSIC and	

		short period of validity are liable to be rejected.	MSME under single point registration scheme and are exempted from paying EMD and tender fee. We are hereby attaching our NSIC registration certificate against EMD and Tender fee. Kindly consider our request to relax the clause foe bidder registered with NSIC and MSME.	
8.	Clause No. 14, PAYMENT TERMS: Pt. (ii)	Payment in respect of rupee value components: 80 percent (%) payment shall be made by ERNET India after delivery and satisfactory completion of installation, commissioning, integration, testing and acceptance of the complete solution as well as receipt of pre-receipted bill in duplicate. The vendor has also an option to claim 100% payment at this stage through submission of bank guarantee (BG) valid for 39 months and equivalent to 20 % of the value of purchase order to cover the warranty period of 3 years from the date of last acceptance.  If vendor has not opted for 100% payment as above, then balance 20% percent payment of rupee value components of purchase order after deducting all penalties (if any) would be released in 6 equal instalments on half yearly basis during the warranty period (3 years) upon successful completion of every quarter as well as receipt of pre-receipted bill in triplicate.	Query-1 Recommended payment under  1. 70 % on the delivery of material 2. 20% on installation and commissioning 3. 10% against bank Guarantee of equal Amount	No Change

9.	Clause No. 14,	For Passive Components: 80 percent	Query-1	No Change
,	PAYMENT	(%) payment shall be made by ERNET	Recommended payment under	110 Change
	TERMS:	India after delivery and satisfactory	Recommended payment under	
	TERMS.	completion of installation,	4. 70 % on the delivery of meterial	
	D4 (:::)		4. 70 % on the delivery of material	
	Pt. (iii)	commissioning, integration, testing and	5. 20% on installation and commissioning	
		acceptance of the complete solution		
		(including active component) with	Amount	
		actual supplied/installed/consumed		
		quantities/ items within the overall		
		purchase order (PO) value of the		
		Passive components as well as receipt		
		of pre-receipted bill in duplicate. The		
		vendor has also an option to claim		
		100% payment at this stage through		
		submission of bank guarantee (BG)		
		valid for 39 months and equivalent to		
		20 % of the value of purchase order to		
		cover the warranty period of 3 years		
		from the date of last acceptance.		
10.	Clause No. 15,	Payments for yearly AMC (if awarded)	Query-1	No Change
	WARRANTY/A	will be released after deducting all	Payments for yearly AMC (if awarded) will	
	MC:	penalties (if any) in 2 equal instalments	be released after deducting all penalties (if	
		on half yearly basis over the period of	any) in 12 equal instalments on monthly basis	
	Point No. (ix)	AMC support upon successful	over the period of AMC support upon	
		completion of every quarter.	successful completion of every quarter	
11.	Clause No. 17,	For critical components namely Switch,	Query-1	No Change
	PENALTY	Wireless Controller & Authentication		
	CLAUSE FOR	server: ERNET India may deduct Rs.	For critical components namely Switch,	
	NON	1000/- from the due payments or	Wireless Controller & Authentication server:	
	CONFORMAN	recovered from Bank Guarantee as the	ERNET India may deduct Rs. 1000/- from the	
	CE TO ABOVE	case may be for every 1 hours of down	due payments or recovered from Bank	
	SLA:	time at a stretch or in part up to total	Guarantee as the case may be for every 1	
		down time of 10 hours. This down time	hours of down time at a stretch or in part up to	
	Pt. (i)	shall be calculated over and above the	total down time of 10 hours. This down time	

		1 1	1 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
		total hours of downtime permissible.	shall be calculated over and above the total	
		Beyond 10 hours of down time,	hours of downtime permissible. Beyond 10	
		ERNET may deduct Rs. 3000/- from	hours of down time, ERNET may deduct Rs.	
		the due payments or recovered from	1000/- from the due Payments or recovered	
		Bank Guarantee as the case may be for	from Bank Guarantee as the case may be for	
		every 1 hour of down time at stretch or	every 1 hour of down time at stretch or in	
		in parts. For noncritical components	parts. For noncritical components namely	
		namely Wireless Access Point: ERNET	Wireless Access Point: ERNET may deduct	
		may deduct Rs. 200/- from the due	Rs. 50/- from the due payments or recovered	
		payments or recovered from Bank	from Bank Guarantee as the case may be for	
		Guarantee as the case may be for every	every 1 hours of down time at a stretch or in	
		1 hours of down time at a stretch or in	part up to total down time of 10 hours. This	
		part up to total down time of 10 hours.	down time shall be calculated over and above	
		This down time shall be calculated over	the total hours of downtime permissible.	
		and above the total hours of downtime	Beyond 10 hours of down time, ERNET may	
		permissible. Beyond 10 hours of down	deduct Rs. 500/- from the due payments or	
		time, ERNET may deduct Rs. 500/-	recovered from Bank Guarantee as the case	
		from the due payments or recovered	may be for every 1 hour of down time at	
		from Bank Guarantee as the case may	stretch or in parts.	
		be for every 1 hour of down time at	r	
		stretch or in parts.		
12.	Clause No. 19,	The successful bidder(s) have to	Query-1	No Change
12,	DELIVERY	complete the delivery of all imported	Query 1	110 011111190
	PERIOD	items in US\$ within 10 weeks from the	The successful bidder(s) have to complete the	
	LKIOD	latest due date of submission of security	delivery of all imported items in US\$ within	
	pt. (i)	deposits as per clause 18 (ii) & (iii)	12 weeks from the latest due date of	
	pt. (1)	excluding the period of opening of LC	submission of security deposits	
		by ERNET India. Any delay by the	suchingsion of security deposits	
		supplier in the performance of delivery		
		of items shall render the supplier liable		
		to any or all of the following sanctions-		
		forfeiture of its i) Earnest Money		
		Deposit, performance security as per		
		clause 18, ii) imposition of liquidated		
		damage as per clause 20 below or/and		
	l	duffuge as per clause 20 below of and		

13.	Clause No. 19, DELIVERY PERIOD Pt. (iii)	iii) cancellation of the purchase order for default.  The successful bidder(s) have to complete the delivery (installation, commissioning, testing & acceptance of the ordered items (including active & passive equipment) as per the scope of work within 24 weeks from the date of respective purchase orders. For delivery of imported items clause 19(i) will be applicable	Query-1 The successful bidder(s) have to complete the delivery (installation, commissioning, testing & acceptance of the ordered items (including active & passive equipment) as per the scope of work within 36 weeks from the date of respective purchase orders.	No Change
14.	Clause No. 20, LIQUIDATED DAMAGES(LD )	In the event of the Bidder's failure to deliver / install & commission/ acceptance of the solution by the date/dates specified in this tender document or any extended period, ERNET India may at its discretion withhold any payment, as liquidated damages and not by way of penalty at the rate of 2% of the value of purchase order per week or a part of a week subject to a maximum of 10%. The amount towards Liquidated Damage would be recovered from any due payment / amount of Bank Guarantee as required vide clause 18 above. The LD will not be imposed in case the delay is not on part of the bidder.	Query-1 In the event of the Bidder's failure to deliver / install & commission / acceptance of the solution by the date/dates specified in the tender document or any extended period, ERNET India may at its discretion with hold any payment, as liquidated damages and not by way of penalty at the rate of 0.2% of the value of purchase order per day or a part of a week subject to a maximum of 10%. Request you to reduce the LD and mention the Liquidated changes in terms of days i.e. 0.2% per day so that minimum capping of 0.2% Liquidated damages are not charged for delay less than a week.  Query-2  We request ERNET to amend this to "0.5% of the value of delayed item per week subject to maximum of 5%.	No Change

	T	T	0 1	
			Query-3	
			In the event of the Bidder's failure to deliver /	
			install & commission/ acceptance of the	
			solution by the date/dates specified in this	
			tender document or any extended period,	
			ERNET India may at its discretion withhold	
			any payment, as liquidated damages and not	
			by way of penalty at the rate of 2% of the	
			value of purchase order per week or a part of	
			a week subject to a maximum of 10% of	
			delayed part of work.	
15.	Clause No. 26,	After the L1 bidder is decided on the	Query-1	The clause is Self-Explanatory
	EVALUATION	Gross Total Value (GTV), Annexure-		
	OF TENDER	IIIB submitted by L1 Bidder will be	Recommended to consider L1, L2 & L3	
		opened for deciding the lowest	bidder as per GTV instead of lowest	
	Pt. (xii),C	individual unit item rates for all the	individual unit item	
		items of Annexure-I of this tender.		
16.	Clause No. 27,	The bidder will carry out the work at	Query-1	This RFP is meant to enter into
	SCOPE OF	Universalities / organizations as	Requested to share the list of location along	a rate contract with successful
	WORK	specified by ERNET across India and	with university /organization covered under	bidder(s) and accordingly the
		will be responsible for total system	scope of work.	order(s) will be placed as &
	Pt. (i)	integration and execution of project.		when ERNET receives order(s)
				from its clients.
17.		24 x 24 x 1G SFP line card	Query-1	The clause may be read as:
	of Material,		24x1G SFP line card it seems typo error as	"24 x 1G SFP line card".
			two times 24 is repeated in this clause.	
	A. Active		Request to modify it with only 24x1G SFP	
	Equipment &		line card	
	Components,		Query-2	
	Switch Type 1,		24x1G SFP line card it seems typo error as	
			two times 24 is repeated in this clause.	
	Е		Request to modify it with only 24x1G SFP	
			line card	
			Query-3	
			24x1G SFP line card it seems typo error as	

_				
			two times 24 is repeated in this clause.	
			Request to modify it with only 24x1G SFP	
			line card.	
18.	Annexure-I,	Wireless Access Points supporting	Query-1	RFP is self-explanatory
	Bill of Material	802.11a/b/g/n/ac and with antenna –	24023 2	
	, A. Active	Outdoor	1. Any outdoor UTP cables are required for	
	Equipment &		outdoor access point connectivity or same	
	Components,		asked indoor UTP cable will be use for the	
	Wireless Access		connectivity.	
	Points,		2. Any additional outdoor box are required for	
	Point no. 10		passive connectivity on poll.	
10		Degreet for Addition		New S. No. is added at the
19.	Switch Type 1,	Request for Addition	Query-1	
	2 & Access		All the proposed should be from the same	bottom of the specs table for
	switch (PoE&		OEM proposed for switches. it's requested to	all the three type of Switches:
	non PoE)		add this new clause to ensure the OEM's	"All the proposed SFP/SFP+
			propose their transceiver modules along with	Transceiver Modules should be
			switches to avoid any inter - operability	from the same OEM proposed
			issues.	for switches".
			Query-2	
			All the proposed should be from the same	
			OEM proposed for switches. it's requested to	
			add this new clause to ensure the OEM's	
			propose their transceiver modules along with	
			switches to avoid any inter – operability	
			issues.	
			Query-3	
			All the proposed SFP/SFP+ Transceiver	
			Modules should be from the same OEM	
			proposed for switches. it's requested to add	
			this new clause to ensure the OEM's propose	
			their transceiver modules along with switches	
			to avoid any inter – operability issues.	
20.	Annexure-I Rill	Excavation & resurfacing of soil upto 1	Query-1	The fibre route markers are
	of Material, B.	meter depth, Hard Soil/concrete, Soft	Any fiber route markers are required for	required.
	Passive	Soil	identification of digging/fiber route?	required.
	1 455110	5011	dentification of digging/floci foute:	

	Components,			
	Point no. 9(iii)			
	A 1 D'II	G I O I I II I CARDE DI		DED: 16
21.	Annexure-I, Bill	11 7	Query-1	RFP is self-explanatory
	of Material, B.	ISI/TEC Approved 40/33mm HDPE Duct Pre lubricated	This items is in alread with tops chlose discins	
	Passive		This item is included with trenchless digging	
	Components, Point no. 9(v)	120mm dia DWC pipe across the road by trench less method	or trenchless digging will be part of normal above digging?	
22.	Annexure-I, Bill	Performance testing of laid Fiber optic	CC C	No Change
22.	of Material, B.	cable (per core) for continuity, length,	Query-1	No Change
	Passive	& optical power loss as per EIA/TIA	Quantity should be 390.	
	Components,	568 & EIA-TIA - 455-60 or latest and	Qualitity should be 390.	
	Point no. 9(viii)	documentation of the results.		
23.	Annexure-I, Bill	Cat6 I/O Datagate Jack shuttered	Query-1	The clause may be read as:
25.	of Material, B.	Cato 1/0 Datagate Jack Shuttered	Datagate jack shuttered word is propritory of	"Cat6 I/O Jack.".
	Passive		Single OEM. RFP has to transparent for	Cuto I & Juck.
	Components,		maximum participation of mutlple OEM and	
	Point no. 10, (ii)		Vendor. Request to amend the same. Ask Cat	
			6 IO Jack.	
24.	Annexure-I, Bill	Face Plate	Query-1	Clause may be read as: "Face
	of Material, B.		- •	plates are required along with
	Passive		Only face plates are required or along with	gang box".
	Components,		gang box.	
	Point no. 10, (vi)			
25.	Annexure-I, Bill	Fibre LIUs, 19" rack mount	Query-1	No Change
	of Material, B.	12 port LIU Unloaded CRS		
	Passive	24 port LIUs Unloaded CRS	LIU has to be mount into Rack hence it better	
	Components,		if it is light weight. Request to amend with	
	Point no. 11, (ii)		LIU material CRS / Power coated	
			Alluminium alloy.	
26.	Annexure-II	Must support Power over Ethernet,	Query-1	The new line item has been
	Technical	local power and power injectors.	Since PoE and local power are given as either	added at annexure-I (Bill of
	Specifications,6.	Should be provided with power adapter.	option of the power source, proving a power	Material) A. Active Equipment
	WirelessAccess		adaptor as a mandate is not relevant. Request	and components, Access Switch
	Points(WAP),		to kindly remove or relax this clause.	( non-POE) as Serial no. 4(D).

	Point No.21			"Power Injector for non-PoE switch – Quantity is 106".
27.	Annexure-II Technical Specifications, A .Active Equipment & Components, Switch Type-1 S. No.1	Should be a modular chassis based switch having minimum 6 interface payload slots with extra slots for redundant CPU/Switch fabric and redundant power supply	Query-1 Should be a modular chassis based switch in cluster having minimum 4 interface payload slots with redundant. Redundant power supply & Fan Tray. Request you ask for 2 separate core switches for ideal network architecture design and resillency. All the leading brands are having to RU Compact switches in their portfolio, which can give you multi-terabyte switching fabric and forwarding rates, these compact core switches can house 96 port of 10 Gig / 24+ ports of 40 Gig /96 ports of 1 G Copper and fiber. These next generation switches occupies less rack space, less power and cooling and and also less AMC cost.	No Change
			Should be a modular chassis switch having minimum 8 interface payload slots with extra slots for redundant CPU/ switch fabric and redundant power supply. Request to increase the interfaces slot from 6 to 8 considering future scalability to have higher port densities.  Query-3  Should be a modular chassis switch having minimum 8 interface payload slots with extra slots for redundant CPU/ switch fabric and redundant power supply. Request to increase the interfaces slot from 6 to 8 considering future scalability to have higher port densities.	

			<u></u>
Annexure-II Technical Specifications, A .Active Equipment & Components, Switch Type-1 S.No2	Should have centralized/distributed switching architecture, each module should be provisioned with adequate hardware/software to support the same.	Query-4 Should be a modular chassis switch having minimum 8 interface payload slots with extra slots for redundant CPU/ switch fabric and redundant power supply. Request to increase the interfaces slot from 6 to 8 considering future scalability to have higher port densities  Query-5 Should be a modular chassis switch having minimum 8 interface payload slots with extra slots for redundant CPU/ switch fabric and redundant power supply. Request to increase the interfaces slot from 6 to 8 considering future scalability to have higher port densities.  Query-1 Should have distributed switching architecture, each module should be provisioned with adequate hardware/software to support the same. The centralized architecture is an old technology when 100/1Gig interfaces were used, Today the technology provided by all OEM's have distributed architecture to reduce latency, high speed interfaces. Request to mention distributed and not centralized as an option.  Query-2 Should have distributed switching architecture, each module should be provisioned with adequate hardware/coftware.	No Change
		architecture, each module should be provisioned with adequate hardware /software to support the same. The centralized architecture is an old technology when 100/1Gig interfaces were used, today the	
	Technical Specifications, A .Active Equipment & Components, Switch Type-1	Technical Specifications, A .Active Equipment & Components, Switch Type-1 switching architecture, each module should be provisioned with adequate hardware/software to support the same.	Should be a modular chassis switch having minimum 8 interface payload slots with extra slots for redundant CPU/ switch fabric and redundant power supply. Request to increase the interfaces slot from 6 to 8 considering future scalability to have higher port densities    Query-5

_		T	T	_
			technology provided by all OEM is have	
			distributed architecture to reduce latency,	
			high speed interfaces. Requested to mention	
			distributed and not centralized as an option.	
29.	Annexure-II	Dual Redundant Switch Fabric/CPU	Query-1	No Change
	Technical	should support minimum 2 Tbps switch	Dual Redundant Switch Fabric/CPU should	_
	Specifications,	fabric capacity per switch. There should	support minimum 5 Tbps switch fabric	May please refer corrected
	A .Active	not be any performance degradation in	capacity per switch. There should not be any	clause at S.No. 31 of this
	Equipment &	case of any switching/routing engine	performance degradation in case of any	document.
	Components,	failure.	switching/routing engine failure. The switch	
	Switch Type-1		mentions certain port requirement and to meet	
	S. No3		the given port requirements, the performance	
			of the switch must be 5Tbps. this is also inline	
			with the previous switch requirements floated	
			by ERNET.	
			Query-2	
			Dual Redundant Switch Fabric/CPU should	
			support minimum 5 Tbps switch fabric	
			capacity per switch. There should not be any	
			performance degradation in case of any	
			switching/routing engine failure. The switch	
			mentions certain port requirement and to meet	
			the given port requirements, the performance	
			of the switch must be 5Tbps. this is also inline	
			with the previous switch requirements floated	
			by ERNET.	
			Query-3	
			Requested you to kindly modify this clause as	
			"Dual Redundant Switch Fabric/CPU should	
			support minimum 4.8 Tbps Switch fabric	
			capacity per switch. There should not be any	
			performance degradation in case of any	
			switching/routing engine failure "since as per	
L	I		1 5 witching fouring engine failure since as per	

30.	Annexure-II	Minimum 1.5 Bpps forwarding rate	the clause no.11 the total non-blocking switching fabric should be 2 * 144 x 10G + 2 x 24 x 40G= 48000Gbps i.e.4.8 Tbps. Request you to kindly change.  Ouery-1	The clause may be read as:
30.	Technical Specifications, A .Active Equipment & Components, Switch Type-1 S. No7	should be supported.	Minimum 1.5 Bpps forwarding rate should be supported for both IPv4 and IPv6. In future when IPV6 is enabled the performance should not be degraded.  Query-2  Request you to kindly modify this clause as "Minimum 3.5 Bpps forwarding rate should be supported. " If the switching fabric is 4800 Gbps than forwarding rate will be (4800/2)*x1.488=3.5 Bpps. Request you to kindly change this clause.  Query-3  Minimum 1.5Bpps forwarding rate should be supported for both IPv4 and IPv6. In future when IPv6 is enabled the performance should not be degraded.	"Minimum 1.5 Bpps forwarded rate should be supported for both IPv4 & IPv6".
31.	Annexure-II Technical Specifications, A. Active Equipment & Components, Switch Type-1 S. No11	Chassis should support upto 144 Nos. of 1/10-Gig non-blocking ports, , support of 24 nos. of 40 GbE ports	Query-1 Typo error	The clause may be read as: "Chassis should support upto 144 Nos. of 1/10-Gig non-blocking ports OR support of 24 nos. of 40 GbE ports".

32.	Annexure-II	Should have hardware enabled advance	Onour 1	The slaves may be read as
34.	Technical		Query-1 Should have advance IP routing protocol	The clause may be read as: "Should have advance IP
	Specifications,	IP routing protocols OSPF, OSPFv3, BGPv4, PIMSSM etc.	OSPF, OSPFv3 BGPv4, PIM-SSM etc from	routing protocol OSPF,
	A .Active	DOF V4, FIMISSIVI etc.	day one. Request to clarify the hardware	OSPFv3 BGPv4, PIM-SSM etc
			enabled clause as it is assumed the proposed	from day one".
	1 1		switch should have all the asked advance	Hom day one.
	Components,		layer3 features from day one.	
	Switch Type-1 S. No17		layers reacutes from day one.	
	S. NO17		Query-2	
			Should have advance IP routing protocol	
			OSPF, OSPFv3 BGPv4, PIM-SSM etc from	
			day one. Request to clarify the hardware	
			enabled clause as it is assumed the proposed	
			switch should have all the asked advance	
			layer3 features from day one.	
			layers reacures from day one.	
			Query-3	
			Should have advance IP routing protocol	
			OSPF, OSPFv3 BGPv4, PIM-SSM etc from	
			day one. Request to clarify the hardware	
			enabled clause as it is assumed the proposed	
			switch should have all the asked advance	
			layer3 features from day one.	
33.	Annexure-II	Switch should support Multicast QoS,	Query-1	The clause may be read as:
	Technical	Multicast ACL, Multicast Netflow/	Please add the equivalent protocol like IPFIX,	"Switch should support
	Specifications,	jFLow/ SFLow,	which can give you same functionality.	Multicast QoS, Multicast ACL,
	A .Active		Equivalent Protocol like IPPIX to achieve	Multicast Netflow/ jFLow/
	Equipment &		same functionality.	SFLow/IPFIX. Switch should
	Components,			support minimum 256K
	Switch Type-1		Query-2	Netflow/ jFLow/ SFLow/ IPFIX
	S. No20			entries".
			Switch should support Multicast QoS,	
			Multicast ACL, Multicast Netflow/jFLow/	
			SFLow. Switch support minimum 256k	
			Netflow/jFLow/ SFLow entries. Any modern	

			day compus consists of multiple handerd	
			day campus consists of multiple hundred	
			thousand of flows and to ensure that there is	
			no malicious traffic flowing through the	
			campus LAN, it is important that the	
			administration has sgrangular visibility into	
			these flows. Netflow/jFLow/ SFLow provide	
			the capability to do the same. At the Same	
			time, it is important to note that the relevant	
			scalability of flow should also be a part of the	
			switch specifications. Therefore, request you	
			to kindly change the clause as requested.	
			Query-3	
			Switch should support Multicast QoS,	
			Multicast ACL, Multicast Netflow/jFLow/	
			SFLow, .Switch support minimum 256k	
			Netflow/jFLow/ SFLow entries. Any modern	
			day campus consists of multiple hundred	
			thousand of flows and to ensure that there is	
			no malicious traffic flowing through the	
			campus LAN, it is important to that the	
			administration has sgrangular visibility into	
			these flows. Netflow/jFLow/ SFLow provide	
			the capability to do the same. At the Same	
			time, it is important to note that the relevant	
			scalability of flow should also be a part of the	
			switch specifications. Therefore, request you	
			to kindly change the clause as requested.	
34.	Annexure-II	Should support minimum 8 k multicast	Query-1	No Change.
	Technical	entries.	Should support minimum 32 k IPv4 and 16 K	8
	Specifications,		IPv6 multicast entries. the switch will be a	
	A .Active		part of the core campus network. In order to	
	Equipment &		provide multiple student service it is a vital	
	Components,		that the switch be able to scale in term of	
	Switch Type-1		multicast route in the interest of better	
	z mich Type I		interest it die interest of better	

	T		T	
	S. No21		solution for the students, requested you to	
			kindly increase the number of multicast	
			routes.	
			Query-2	
			Should support minimum 32 k IPv4 and 16 K	
			IPv6 multicast entries.the switch will be a part	
			of the core campus network. In order to	
			provide multiple student service it is a vital	
			that the switch be able to scale in term of	
			multicast route .in the interest of better	
			solution for the students, requested you to	
			kindly increase the number of multicast	
			routes.	
			Query-3	
			Should support minimum 50% multicast	
			entries. As the traffic for online learning /	
			elearning has grow 8k multicasting route may	
			be less. We request to make to atleast to be	
			increase to 50k.	
			Query-4	
			Should support minimum 50 k multicast	
			entries. As the traffic for online learning /	
			elearning has grow 8k multicasting route may	
			be less. We request to make to atleast to be	
			increase to 50k.	
35.	Annexure-II	Should support minimum 128k IPv4	Query-1	No Change
	Technical	and 24K IPv6 routes	Should support minimum 256k IPv4 and 128	
	Specifications,		IPv6 routes. The maximum number of route	
	A .Active		has been considered on a conservative scale.	
	Equipment &		In order to ensure that the solution is scalable,	
	Components,		request you to kindly keep the number of	
	Switch Type-1		minimum routes in the line with the earlier	
	S. No22		RFPs from ERNET, thereby ensuring the best	
			solution	

					0 . 2	
					Query-2	
					Should support minimum 256k IPv4 and 128	
					IPv6 routes. The maximum number of route	
					has been considered on a conservative scale.	
					In order to ensure that the solution is scalable,	
					request you to kindly keep the number of	
					minimum routes in the line with the earlier	
					RFPs from ERNET, thereby ensuring the best	
					solution.	
					Query-3	
					Should support minimum 128k IPv4 and 128k	
					IPv6 routes. There will be multiple	
					department and various application and all the	
					routing will happen on core hence it is	
					recommended to have the scalabilities .128k	
					IPv4 and 128k IPv6 routes are less for	
					University campus core. We request to make	
					to atleast 128k IPv4 and IPv6 routes.	
					Query-4	
					Should support minimum 128k IPv4 and 64k	
					IPv6 routes. There will be multiple	
					department and various application and all the	
					routing will happen on core hence it is	
					recommended to have the scalabilities .128k	
					IPv4 and 24k IPv6 routes are less for	
					University campus core. We request to make	
					to atleast 128k IPv4 and 64k IPv6 routes.	
36.	Annexure-II	Switch should	support	minimum 8k	Query-1	No Change
	Technical	Security ACLs	11		Switch should support minimum 128k QoS	5
	Specifications,	, ,			ACLs and Security ACLs. The Access control	
	A .Active				list/entries are concerned with the QoS and	
	Equipment &				security of the entire solution keeping in mind	
	Components,				the amount of traffic and the multiple classes	
	Switch Type-1				of the same, it is imperative to consider the	
	S. No31				ability to QoS and security. The increased	
<u> </u>	5.110.51				active to goo and security. The increased	

_				
			number of QoS and Security ACLs will	
			provide ERNET and the college	
			administration the tool ensure the best per	
			person bandwidth while being secure at the	
			same time.	
			Query-2	
			Switch should support minimum 128k QoS	
			ACLs and Security ACLs. The Access control	
			list/entries are concerned with the QoS and	
			security of the entire solution keeping in mind	
			the amount of traffic and the multiple classes	
			of the same, it is imperative to consider the	
			ability to QoS and security. The increased	
			number of QoS and Security ACLs will	
			provide ERNET and the college	
			administration the tool ensure the best per	
			person bandwidth while being secure at the	
			same time.	
			Query-3	
			Request you to kindly modify this clause as	
			'Switch should support minimum 3K security	
			ACLs" The technology differs from OEM to	
			OEM. Since this is core switch and 3K ACL	
			is sufficient. It will unnecessarily increase the	
			overall cost of total solution. Request you to	
			kindly modify so that max. OEM can	
			participate.	
37.	Annexure-II	Switch should be IPv6 Certified/ Ready	Query-1	No Change
	Technical	Logo/TEC certified	Kindly modify clause as "The switch should	3
	Specifications,		be IPV6 certified / Ready logo / IPV6 ready	
	A .Active		feom day 1". Please change the clause for	
	Equipment &		major OEM to participate.	
	Components,		major obin to participate.	
	Switch Type-1		Query-2	
	S. No36		Kindly modified clause as "the switch be IPv6	
	D. 14030		Kindry modified clause as the switch be 17 vo	

			Certified/ Ready Logo/IPv6 ready from Day	
			1". Please change the clause for major OEM	
			to participate.  Query-3	
			Kindly modify clause as "The switch should	
			be IPV6 certified / Ready logo / IPV6 ready	
			feom day 1". Please change the clause for	
			major OEM to participate.	
38.	Annexure-II	Switch should be minimum EAL3 of	Query-1	No Change
	Technical	common criteria Certified or NDPP or	Request you to delete the same, Avaya	
	Specifications,	equivalent	Switches is been deployed at various	
	A .Active		government & defence organizations across	
	Equipment &		the world. Our switches is been tested by	
	Components, Switch Type-1		leading Defence lab from US government to ascertain our switches are fully secure.	
	S. No38		Secondly NDPP is the latest certification	
	5. 14036		carried out by common criteria labs now days.	
			curried out by common criteria labs now days.	
			Query-2	
			Switch should be minimum EAL3, of	
			common criteria certified or NDPP. Request	
			as only EAL3 or NDPP are defined by	
			common criteria. By having open clauses with	
			equivalent option OEM's would propose	
			different type of certification against this	
			resulting compromise on security.	
			Query-3	
			Switch should be minimum EAL3, of	
			common criteria certified or NDPP. Request	
			as only EAL3 or NDPP are defined by	
			common criteria. By having open clauses with	
			equivalent option OEM's would propose	
			different type of certification against this	
			resulting compromise on security.	

			Query-4	
			Switch should be minimum EAL3, of common criteria certified or NDPP. Request	
			as only EAL3 or NDPP are defined by	
			common criteria. By having open clauses with	
			equivalent option OEM's would propose	
			different type of certification against this	
			resulting compromise on security	
39.	Annexure-II	Switch should have 48 x 1G SFP Port	Query-1	<b>Explanation of the clause:</b>
	Technical	and at least 4 x 10G SFP port. one	Switch should have 48x10G SFP port and at	"The desired port density may
	Specifications,	console port and one out of band	least 4x40G SFP port. One console port and	be achieved by single or more
	A .Active	management Ethernet port.	one out of band management Ethernet port.	than one switch in stacking
	Equipment &		Now days core to distribution to access	provided there is no
	Components,		switch's uplink port are on 10G connectivity,	performance or feature
	Switch Type-2 S. No2		therefore its advisable to have distribution switch with 10G SFP connectivity. Kindly	degradation".
	S. NO2		amend this to 48 port 10G SFP+ with a	
			provision of 40 Gig back haul to the core.	
			provision of to org back hauf to the core.	
			Query-2	
			Switch should have 48 x 1G/10G SFP Port	
			and at least 4 x 40G QSFP port. One console	
			port and one out of band management	
			ethernet port. The switch type being asked for	
			the fiber 1G. since the switches available	
			with all OEMs in the industry are 1/10G	
			capable without any price differential, request	
			you to kindly ensure that the port asked for are 1/10G capable. The uplink ports on the	
			other hand, must be 40 g in any modern day	
			campus network. With the advent of high	
			speed wireless in campus ,the current uplinks	
			will definitely prove to be bottleneck in the	
			network very very soon also Since the core	

switch ask for 24x40G port support, it is imperative that the distribution switches also have 40 g uplink port in the order to maintain a bottleneck free campus network for student.

### Query-3

Switch should have 48 x 1G/10G SFP Port and at least 4 x 40G QSFP port. One console port and one out of band management ethernet port. The switch type being asked for the fiber 1G. since the switches available with all OEMs in the industry are 1/10G capable without any price differential, request you to kindly ensure that the port asked for are 1/10G capable. The uplink ports on the other hand, must be 40 g in any modern day campus network. With the advent of high speed wireless in campus ,the current uplinks will definitely prove to be bottleneck in the network very very soon also Since the core switch ask for 24x40G port support, it is imperative that the distribution switches also have 40 g uplink port in the order to maintain a bottleneck free campus network for student.

# **Query-4**

Request you to kindly change this clause as "Switch should have 24 x 1G SFP port and at least 4 x 10G SFP port. One console port and one out of band management Ethernet port" The architecture and technology differs from OEM to OEMs. This combination of interface is OEM specific. Request you to kindly modify so that max. OEM can participate.

	Г			Г
			Query-5	
			Switch should have 40x1G SFP port and at	
			least 4x10G SFP Port . one console port and	
			one out of band management Ethernet port.	
			40 Port 1G Fiber switch are not available with	
			most of the OEM. We request to make it 40	
			Port for major OEM to participate.	
			J 1 1	
			Query-6	
			Switch should have 40 x 1G SFP Port and at	
			least 4 x 10G SFP port. one console port and	
			one out of band management ethernet port .	
			40 port 1G Fiber switch are not available with	
			most of the OEM. We request to make it 40	
			port for major OEM to participate.	
			port for major oblive to participate.	
			Query-7	
			Switch should have 40x1G SFP port and at	
			least 4x10G SFP Port . one console port and	
			one out of band management Ethernet port.	
			48 Port 1G Fiber switch are not available with	
			most of the OEM. We request to make it 40	
			Port for major OEM to participate.	
40.	Annexure-II	Switch should have 40 Gbps Stacking	Query-1	No Change
40.	Technical	bandwidth (full duplex)	Switch should have 40 Gbps Stacking	140 Change
	Specifications,	bandwidin (fun duplex)	/clustering bandwidth (Full duplex). On the	Kindly Refer explanation
	A .Active		distribution layer, stacking is not used in	provided above at S. No. 39.
			distribution or core layer.	provided above at S. No. 39.
	1 1		distribution of core layer.	
	Components,		O 2	
	Switch Type-2 S. No5		Query-2	
	S. 1NO3		Kindly remove the clause. Stacking is a	
			feature for access layer Switches and not	
1			available in 48 port fiber switches .we are the	
			OEM with the largest market share in the	
			world for switches and this is one of the	

	ı			
			clauses that makes us non complied and	
			unable to participate in this esteemed RFP.	
			Query-3	
			Kindly remove the clause. Stacking is a	
			feature for access layer Switches and not	
			available in 48 port fiber switches. We are the	
			OEM with the largest market share in the	
			world for switches and this is one of the	
			clauses that makes us non complied and	
			unable to participate in this esteemed RFP.	N. Cl
41.	Annexure-II	Switch should offer minimum 176	Query-1	No Change
	Technical	Gbps switching capacity	Switch should offer minimum 1.44Tbps	
	Specifications,		switching capacity. The performance being	
	A .Active		asked for this switch is highly conservative	
	Equipment &		and will not be sufficient to cover the number	
	Components,		of port work at line rate speed, request you to	
	Switch Type-2		kindly increase the performance figures.	
	S. No7			
			Query-2	
			Switch should offer minimum 1.44Tbps	
			switching capacity. The performance being	
			asked for this switch is highly conservative	
			and will not be sufficient to cover the number	
			of port work at line rate speed, request you to	
			kindly increase the performance figures.	
42.	Annexure-II	Switch should support 130 Mpps of	Query-1	No Change
74.	Technical	forwarding rate.	Switch should support 1000 Mpps of	110 Change
	Specifications,	Torwarding rate.	forwarding rate. The performance being asked	
	A .Active			
			for this switch is highly conservative and will	
	Equipment &		not be sufficient to cover the number of ports	
	Components,		being asked for to ensure that all ports work at	
	Switch Type-2		line rate speed request you to kindly increase	
	S. No9		the performance figures.	

43. Annexure-II Technical Specifications, A .Active Equipment & Components, Switch Type-2 S. No10  Should support 2k multicast routes in hardware  Should support 8k multicast routes in hardware. The switch will be a part of the core campus network. In order to provide multiple student service, it is a vital that the switch be able to scale in term of multicast route in the interest of better solution for the students, requested you to kindly increase the number of multicast routes.  Query-1  Should support 8k multicast routes in hardware. The switch be able to scale in term of multicast routes in hardware. The switch will be a part of the cpre campus network. In order to provide multiple student service, it is a vital that the switch be able to scale in term of multicast route in the interest of better solution for the students, requested you to kindly increase the number of multicast route in the interest of better solution for the students, requested you to kindly increase the number of multicast routes.	pps of g asked and will of ports work at ncrease
A .Active Equipment & Components, Switch Type-2 S. No10  Query-2 Should support 8k multicast routes in hardware. The switch will be a part of the cpre campus network. In order to provide multiple student service, it is a vital that the switch be able to scale in term of multicast route in the interest of better solution for the students, requested you to kindly increase the number of multicast routes.  Query-2 Should support 8k multicast routes in hardware. The switch will be a part of the cpre campus network. In order to provide multiple student service, it is a vital that the switch be able to scale in term of multicast route in the interest of better solution for the students, requested you to kindly increase the	ntes in No Change
Equipment & Components, Switch Type-2 S. No10  Query-2 Should support 8k multicast routes in hardware. The switch will be a part of the cpre campus network. In order to provide multiple student service, it is a vital that the switch be able to scale in term of multicast routes in hardware. The switch will be a part of the cpre campus network. In order to provide multiple student service, it is a vital that the switch be able to scale in term of multicast route in the interest of better solution for the students, requested you to kindly increase the	
Components, Switch Type-2 S. No10  Switch be able to scale in term of multicast route in the interest of better solution for the students, requested you to kindly increase the number of multicast routes.  Query-2 Should support 8k multicast routes in hardware. The switch will be a part of the cpre campus network. In order to provide multiple student service, it is a vital that the switch be able to scale in term of multicast route in the interest of better solution for the students, requested you to kindly increase the	<u> </u>
S. No10  Students, requested you to kindly increase the number of multicast routes.  Query-2  Should support 8k multicast routes in hardware. The switch will be a part of the cpre campus network. In order to provide multiple student service, it is a vital that the switch be able to scale in term of multicast route in the interest of better solution for the students, requested you to kindly increase the	
Query-2 Should support 8k multicast routes in hardware. The switch will be a part of the cpre campus network. In order to provide multiple student service, it is a vital that the switch be able to scale in term of multicast route .in the interest of better solution for the students, requested you to kindly increase the	
Should support 8k multicast routes in hardware. The switch will be a part of the cpre campus network. In order to provide multiple student service, it is a vital that the switch be able to scale in term of multicast route .in the interest of better solution for the students, requested you to kindly increase the	
	of the provide that the nulticast for the
Query-3 Should support minimum 8k multicast entries. The multicast traffic will start from L3 switch and 2k is may not suffice keeping the amount of multicast traffic due to the growth of online /e-learning 2k route at the switch may not	S switch amount f online

			8k.	
44.	Annexure-II Technical Specifications, A .Active Equipment & Components, Switch Type-2 S. No16	Should support secure VTP or equivalent to reduce administrative burden of configuring VLANs on multiple switches in turn eliminating the configuration errors & troubleshooting in secure manner.	Query-1 Should support secure VTP or equivalent to reduce administrative burden of configuring VLANs on multiple switches in turn eliminating the configuration errors & troubleshooting. Secure VTP is Cisco proprietary protocol the equivalent to this as per industry standard is GVRP hence we request to modify the clauses as per request	The clause may be read as: "Should support VTP or equivalent to reduce administrative burden of configuring VLANs on multiple switches in turn eliminating the configuration errors & troubleshooting in secure manner".
			Query-2 Should support secure VTP or equivalent to reduce administrative burden of configuring VLANs on multiple switches in turn eliminating the configuration errors & troubleshooting. Secure VTP is Cisco proprietary protocol the equivalent to this as per industry standard is GVRP hence we request to modify the clauses as per request	
			Query-3 Should support secure VTP or equivalent to reduce administrative burden of configuring VLANs on multiple switches in turn eliminating the configuration errors & troubleshooting. Secure VTP is Cisco proprietary protocol the equivalent to this as per industry standard is GVRP hence we request to modify the clauses as per request	
45.	Annexure-II	Should have IEEE compliance for	Query-1	This clause may be read as:
	Technical	802.1Q VLAN, 801.2p, 802.1d STP,	Should have IEEE compliance for 802.1Q	"Should have IEEE compliance

	Specifications, A .Active Equipment & Components, Switch Type-2 S. No19	802.3ad,802.1w RSTP,802.1Smstp, RPVST+,802.3AD LACP,IEEE 802.1ab,Link Layer Discovery Protocol.	VLAN, 801.2p,802.1d STP, 8023ad, 802.1w RSTP, 802.1 smstp, 802.3AD LACP, IEEE 802.1ab, Link Layer Discovery Protocol. Kindly Remove, RPVST+, its some vendor proprietary protocol, Please write equivalent protocol like MSTP.	for 802.1Q VLAN, 802.1p,802.1d STP, 802.3ad, 802.1w RSTP, 802.1s mstp, RPVST+/ MSTP, 802.3AD LACP, IEEE 802.1ab, Link layer discovery Protocol."
	S. NO19		Query-2 Request you to kindly change This clause as " Should have IEEE compliance for 802.1Q VLAN, 802.1p,802.1d STP, 802.3ad, 802.1w RSTP, 802.1s mstp, RPVST+, 802.3AD LACP, IEEE 802.1ab, Link layer discovery Protocol." Link typo mistake.	layer discovery Protocor.
46.	Annexure-II Technical Specifications, A .Active Equipment & Components, Switch Type-2 S. No24	Should have hardware enable advance ip routing protocols OSPF,OSPFV3, BGPV4, PIM-DM,PIM-SSM etc.	Query-1 Should have advance IP routing protocol s OSPF, OSPFv3 BGPv4, PIM-SSM etc from day one. Request to clarify the hardware enabled clause as it is assumed the proposed switch should have all the asked advance layer3 features from day one.  Query-2 Should have advance IP routing protocol s OSPF, OSPFv3 BGPv4, PIM-SSM etc from day one. Request to clarify the hardware enabled clause as it is assumed the proposed switch should have all the asked advance layer3 features from day one.  Query-3 Should have advance IP routing protocol s OSPF, OSPFv3 BGPv4, PIM-SSM etc from day one. Request to clarify the hardware enabled clause as it is assumed the proposed switch should have all the asked advance layer3 features from day one.	The clause may be read as: "Should have advance IP routing protocols OSPF, OSPFv3 BGPv4, PIM-SSM etc from day one".

47.	Annexure-II Technical Specifications, A .Active Equipment & Components, Switch Type-2 S. No36	Should provide local and Remote Port Mirroring	Query-1 Should provide local port mirroring. kindly removed, As RSPAN OR ERSPAN, causes of unnecessary CPU and bandwidth utilization	No Change
48.	Annexure-II Technical Specifications, A .Active Equipment & Components, Switch Type-2 S. No44	Switch should be IPv6 Certified/ Ready Logo/TEC certified	Query-1 Kindly modify clause as "The switch should be IPv6 Certified /Ready Logo/IPv6 ready from Day 1". Please change the clause for major OEM to participate.  Query-2 Kindly modify clause as "The switch should be IPV6 certified / Ready logo / IPV6 ready feom day 1".Please change the clause for major OEM to participate.	No Change
49.	Annexure-II Technical Specifications, A .Active Equipment & Components, Switch Type-2 S. No45	Switch should be minimum EAL3 of common criteria Certified or NDPP or equivalent.	Query-1 Request you to delete the same , Avaya Switches is been deployed at various government & defence organizations across the world. Our switches is been tested by leading Defence lab from US government to ascertain our switches are fully secure. Secondly NDcPP is the lastest certification carried out by common criterian labs now days.  Query-2 Switch should be minimum EAL3, of	No Change

common criteria certified or NDPP. Request	
as only EAL3 or NDPP are defined by	
common criteria. By having open clauses with	
equivalent option OEM's would propose	
different type of certification against this	
resulting compromise on security.	
Query-3	
Switch should be minimum EAL3, of	
common criteria certified or NDPP. Request	
as only EAL3 or NDPP are defined by	
common criteria. By having open clauses with	
equivalent option OEM's would propose	
different type of certification against this	
resulting compromise on security.	
Query-4	
Switch should be minimum EAL3, of	
common criteria certified or NDPP. Request	
as only EAL3 or NDPP are defined by	
common criteria. By having open clauses with	
equivalent option OEM's would propose	
different type of certification against this	
resulting compromise on security.	
50. Annexure-II Additional Point Query-1	No Change
Technical Should have filters/Access-list on all ports	
Specifications, with support for min 4K ACLs. The switch	
A .Active specifications must ensure that there is a	
Equipment & minimum threshold defined for the number of	
Components, access list supported .Since ACLs are the	
Switch Type-2 most basic form and first layer of security	
implemented at any campus network, it is	
vital that the switch support these in good	
numbers .Also .it is in line with the earlier	
tenders floated by ERNET and also with the	
switch type 1 specification mentioned in this	
tender.	

		T		<u></u>
			Query-2	
			Should have filters/Access-list on all ports	
			with support for min 4K ACLs. The switch	
			specifications must ensure that there is a	
			minimum threshold defined for the number of	
			access list support .Since ACLs are the most	
			basic form and first layer of security	
			implemented at any campus network, it is	
			vital that the switch support these in good	
			numbers .Also .it is in line with the earlier	
			tenders floated by ERNET and also with the switch type 1 specification mentioned in this	
			tender.	
51.	Annexure-II	Switch should have 40 Chrs Stacking		The Clause may be used as
51.	Technical	Switch should have 40 Gbps Stacking bandwidth (full duplex) and stackable	Query-1	The Clause may be read as: "Switch should have 80 Gbps
	Specifications,	upto minimum 8 units in a single stack.	Switch should support Stacking bandwidth of	stacking bandwidth on separate
	A .Active	upto minimum o umis in a single stack.	80 Gbps with dedicated stacking port. It is	ports (in addition to uplinks)
	Equipment &		important that switch ask for dedicated	and stackable upto minimum 8
	Components,		stacking port. Since there are OEMs who	units in a single stack".
	Access Switch		have product that have no demarcation	units in a single stack.
	(PoE & non		between uplink and stacking ports, it is	
	PoE), Technical		important to clarify that the uplinks ports can	
	Specification S.		only be used for uplinks and dedicated	
	No3		stacking ports will be required for stacking,	
			Query-2	
			Switch should support Stacking bandwidth of	
			80 Gbps with dedicated stacking port. It is	
			important that switch ask for dedicated	
			stacking port. Since there are OEMs who	
			have product that have no demarcation	
			between uplink and stacking ports, it is	
			important to clarify that the uplinks ports can	
			only be used for uplinks and dedicated	
			stacking ports will be required for stacking	

### Query-3

Switch should have 80 Gbps stacking bandwidth Stacking bandwidth (full duplex) in addition to uplink ports and stackable upto minimum 8 units in a single stack. The asked 40Gbps stacks desired user port density  $24x1G = 24Gbps \ x \ 2 = 48 \ Gbps$ . There would be multiple units in a single stack to cater lager user density (minimum 8 units in a single stack) at hostels/buildings hence to support this higher stacking bandwidth is very much desired to avoid performance issues. We recommend to have atleast minimum 80Gbps of stocking bandwidth (in addition to asked uplink ports).

## **Query-4**

Switch should have 80 Gbps stacking bandwidth Stacking bandwidth (full duplex) in addition to uplink ports and stackable upto minimum 8 units in a single stack. The asked 40Gbps stacks desired user port density  $24x1G = 24Gbps \ x \ 2 = 48 Gbps$ . There would be multiple units in a single stack to cater lager user density (minimum 8 units in a single stack) at hostels/buildings hence to support this higher stacking bandwidth is very much desired to avoid performance issues. We recommend to have atleast minimum 80Gbps of stocking bandwidth (in addition to asked uplink ports).

#### **Query-5**

Switch should have 80 Gbps stacking

bandwidth Stacking bandwidth (full duplex) in addition to uplink ports and stackable upto minimum 8 units in a single stack. The asked 40Gbps stacks desired user port density  $24x1G = 24Gbps \ x \ 2 = 48 \ Gbps$ . There would be multiple units in a single stack to cater lager user density (minimum 8 units in a single stack) at hostels/buildings hence to support this higher stacking bandwidth is very much desired to avoid performance issues. We recommend to have atleast minimum 80Gbps of stocking bandwidth (in addition to asked uplink ports).

# Query-6

Request you to kindly modify this clause as "Switch should have 40 Gbps Stacking bandwidth (full duplex) and stackable upto minimum 4 unites in a single stack "Technology and architecture differs from OEM to OEMs. 4 units per stack is sufficient. 4 units stack means 96 nos. of interfaces in per stack. It will also inflate the cost of overall solution. Request you to kindly modify so that max. OEM can participate.

## Query-7

Switch should have 40 Gbps stacking bandwidth and stackable upto minimum 8 units in a single stack. Stacking is only for switch to switch communication and not for uplink traffic. Stacking bandwidth is unidirectional hence we request it to make it 40 Gbps unidirectional.

# **Query-8**

Switch should have 40 GbpsStacking

			11	
			bandwidth and stackable upto minimum 8	
			units in a single stack. Stacking is only foe	
			switch to switch communication and not for	
			Uplink traffic. Stacking bandwidth is	
			unidirectional hence we request it to make it	
			40Gbps unidirectional.	
52.	Annexure-II	Switch should have non-blocking	Query-1	The clause may be read as:
	Technical	switching fabric of minimum 128 Gbps	Switch should have non blocking switching	"Switch should have non-
	Specifications,	or more and should have forwarding	fabric of minimum 128 Gbps or more and	blocking switching fabric of
	A .Active	rate of minimum 95 Mpps.	should have forwarding rate of minimum	minimum 88 Gbps or more and
	Equipment &		66Mpps. Kindly Reduce from 95 Mpps to 66	should have forwarding rate of
	Components,		Mpps. Since the connectivity asked in specs	minimum 65 Mpps".
	Access Switch		for access of 1G and also considering general	- 1
	(PoE & non		uses any thing above 60 Mpps is not use.	
	PoE), Technical		Query-2	
	Specification S.		Request you to kindly change this clause as	
	No7		"Switch should have non-blocking switching	
			fabric of minimum 128 Gbps or more and	
			should have forwarding rate of minimum 95	
			Mpps." As per the non-blocking architecture	
			the switching capacity will be (2 x24 x 1G)+	
			$(2 \times 2 \times 10G) = 88$ Gbps and throughput will	
			be 88/2 x 1.488=65.4 mpps. Request you to	
			kindly change so that max. OEM can	
			participate.	
53.	Annexure-II	Switch should support power supply	Query-1	No Change
	Technical	redundancy	Request you to kindly remove this clause.	8
	Specifications,		Since redundant power supply is not required	
	A .Active		in layer-2 end user/access level Switches. It	
	Equipment &		will also unnecessary increase the cost of	
	Components,		overall solution. Request you to kindly	
	Access Switch		change so that max. OEM can participate this	
	(PoE & non		opportunity.	
	PoE), Technical		Query-2	
	Specification S.		Switch should support internal power supply	
<u> </u>	Premiention b.		2 bliodia support internal power suppry	

	N. 0		1 1 77' 11 1'0 1 "77' 1	
	No8		redundancy. Kindly modify clause as "Switch	
			should support internal power supply	
			redundancy". Most of the device failure	
			happen due to power supply failure so it is	
			recommended to have the internal power	
			supply redundancy.	
			Query-3	
			Switch should support internal power supply	
			redundancy. Kindly modify clause as "Switch	
			should support internal power supply	
			redundancy". Most of the device failure	
			happens due to power supply failure so it is	
			recommended to have the internal power	
			supply redundancy.	
			Query-4	
			Switch should support internal power supply	
			redundancy. Kindly modify clause as "Switch	
			should support internal power supply	
			redundancy". Most of the device failure	
			happens due to power supply failure so it is	
			recommended to have the internal power	
			supply redundancy	
54.	Annexure-II	Switch should support IGMP v1/v2/v3	Query-1	No Change
	Technical	as well as IGMP v1/v2/v3 snooping	Switch should support IGMP v1/v2/v3 as well	The Change
	Specifications,	as wen as remarked to the shooping	as IGMP v1/v2/v3 snooping and minimum 4k	
	A .Active		IGMP Groups. As multicast routes has been	
	Equipment &		asked in the Core and Distribution Switch	
	Components,		considering criticality of this feature multicast	
	Access Switch		session get terminated at Access Layer that's	
	(PoE & non		where no limit of IGMP Groups specified. It	
	PoE), Technical		is strongly recommended to add minimum 4k	
	Specification S.		IGMP Group to support video streaming	
	No13		readiness etc. Today multicast is prime	
	110. 15		application and even it may be centrally	
			controlled for all colleges/ university in future	
L	l		controlled for all colleges/ university in future	

for which it's must to have higher IGMP Groups. Hence we request you to incorporate the same to avoid any solution bottleneck.

## Query-2

Switch should support IGMP v1/v2/v3 as well as IGMP v1/v2/v3 snooping and minimum 4k IGMP Groups. As multicast routes has been asked in the Core and Distribution Switch considering criticality of this feature multicast session get terminated at Access Layer that's where no limit of IGMP Groups specified. It is strongly recommended to add minimum 4k IGMP Group to support video streaming readiness etc. Today multicast is prime application and even it may be centrally controlled for all colleges/ university in future for which it's must to have higher IGMP Groups. Hence we request you to incorporate the same to avoid any solution bottleneck.

## Query-3

Switch should support IGMP v1/v2/v3 as well as IGMP v1/v2/v3 snooping and minimum 4k IGMP Groups. As multicast routes has been asked in the Core and Distribution Switch considering criticality of this feature multicast session get terminated at Access Layer that's where no limit of IGMP Groups specified. It is strongly recommended to add minimum 4k IGMP Group to support video streaming readiness etc. Today multicast is prime application and even it may be centrally controlled for all colleges/ university in future for which it's must to have higher IGMP

			Groups. Hence we request you to incorporate the same to avoid any solution bottleneck.	
55.	Annexure-II Technical Specifications, A .Active Equipment & Components, Access Switch (PoE & non PoE), Technical Specification S. No16	Should support inter-vlan routing and OSPF.	Query-1 Should support inter-vlan routing, OSPF and OSPFv3. It's important to have IPv6 readiness too for Layer 3 convergence hence request to consider OSPFv3 as well.  Query-2 Should support inter-vlan routing, OSPF and OSPFv3. It's important to have IPv6 readiness too for Layer 3 convergence hence request to consider OSPFv3 as well.  Query-3 Should support inter-vlan routing, OSPF and OSPFv3. It's important to have IPv6 readiness too for Layer 3 convergence hence request to consider OSPFv3 as well.  Query-4 Request you kindly change this clause as "Should support inter-vlan routing" Technology differs from OEM to OEMs. Since asked switch is Layer-2 Access Switch whereas OSPF is Layer-3 protocol. Request you to kindly remove so that max. OEM can participate.	The clause may be read as: "Should support inter-vlan routing, OSPF and OSPFv3".

56.	Annexure-II	Switch should be IPv6 Certified/ Ready	Query-1	No Change
20.	Technical	Logo/TEC certified	Kindly modify clause as "The switch should	Two Change
	Specifications,	Logo, 120 columes	be IPv6 Certified /Ready Logo/IPv6 ready	
	A .Active		from Day 1". Please change the clause for	
	Equipment &		major OEM to participate.	
	Components,		Query-2	
	Access Switch		Kindly modify clause as "The switch should	
	(PoE & non		be IPV6 certified / Ready logo / IPV6 ready	
	PoE), Technical		feom day 1".Please change the clause for	
	Specification S.		major OEM to participate.	
	No37		Query-3	
			Kindly modify clause as "The switch should	
			be IPV6 certified / Ready logo / IPV6 ready	
			feom day 1".Please change the clause for	
			major OEM to participate	
57.	Annexure-II	Switch should be minimum EAL3 of	Query-1	No Change
	Technical	common criteria Certified or NDPP or	Request you to delete the same, Avaya	
	Specifications,	equivalent	Switches is been deployed at various	
	A .Active		government & defence organizations across	
	Equipment &		the world. Our switches is been tested by	
	Components,		leading Defence lab from US government to	
	Access Switch		ascertain our switches are fully secure.	
	(PoE & non		Secondly NDcPP is the lastest certification	
	PoE), Technical		carried out by common criterian labs now	
	Specification S. No38		days.	
	1038		Query-2 Switch should be minimum EAL3, of	
			common criteria certified or NDPP. Request	
			as only EAL3 or NDPP are defined by	
			common criteria. By having open clauses with	
			equivalent option OEM's would propose	
			different type of certification against this	
			resulting compromise on security.	
			Query-3	
			Switch should be minimum EAL3, of	

		T	T	
			common criteria certified or NDPP. Request	
			as only EAL3 or NDPP are defined by	
			common criteria. By having open clauses with	
			equivalent option OEM's would propose	
			different type of certification against this	
			resulting compromise on security.	
			Query-4	
			Switch should be minimum EAL3, of	
			common criteria certified or NDPP. Request	
			as only EAL3 or NDPP are defined by	
			common criteria. By having open clauses with	
			equivalent option OEM's would propose	
			different type of certification against this	
			resulting compromise on security.	
58.	Annexure-II	The NMS should support management	Query-1	No Change
	Technical	of Network devices like switches, wi-fi	Please change it to "The NMS should support	
	Specifications,	controllers and other SNMP based	management of network devices like routers	
	A .Active	devices.	switches and other SNMP based devices ".	
	Equipment &		Since different kind of equipments are asked,	
	Components, 4.		we request to change the NMS to EMS for	
	Network		their respective products for the management	
	Management		purpose and should have north bound API's	
	System (NMS),		to connect with Umbrella NMS as and when	
	Technical		required. We request to amend the clause for	
	Specification S.		leading OEM to participate.	
	No1		Query-2	
			Please change it to "The NMS should support	
			management of Network devices like Routers,	
			switches and other SNMP based devices.	
			Since different kind of equipment are asked,	
			We request to change the NMS to EMS for	
			their respective products for the management	
			purpose and should have north bound API's	
			to connect with Umbrella NMS as and when	
			required. We request to amend the clause for	

			leading OEM to participate.	
59.	Annexure-II Technical Specifications, A .Active Equipment & Components, 4. Network Management System (NMS), Technical Specification S. No11	The NMS should support multiple protocols such as https, SSL, SCP, SSH, FTP, TFTP, Telnet and SNMP (v1, v2c and v3).	Query-1 The NMS should support multiple protocols such as https, SSL, SCP, SSH, FTP, TFTP, Telnet and SNMP (v1, v2c and v3). There are multiple protocol used in NMS for configuration management. All the devices does support SSH, Telnet, SCP, is a vendor lockout spec. We recommend removing SCP from this spec.  Query-2 The NMS should support multiple protocols such as https, SSL, SCP, SSH, FTP, TFTP, Telnet and SNMP (v1, v2c and v3). There are multiple protocol used in NMS for configuration management. All the devices does support SSH, Telnet, SCP, is a vendor lockout spec. We recommend removing SCP from this spec.  Query-3 The NMS should support multiple protocols such as https, SSL, SCP, SSH, FTP, TFTP, Telnet and SNMP (v1, v2c and v3). There are multiple protocol used in NMS for configuration management. All the devices does support SSH, Telnet, SCP, is a vendor lockout spec. We recommend removing SCP from this spec.  Query-4 Please change it to "The NMS should support multiple protocol such as https, SSH, FTP, TFTP, Telnet and other SNMP (v1,v2c and v3). Please amend for leading OEM to participate".	The clause may be read as: "The NMS should support multiple protocols such as https, SSL, SSH, FTP, TFTP, Telnet and SNMP (v1, v2c and v3)".

			Query-5 Please change it to "The NMS should support multiple protocols such as https, SSH, FTP, TFTP, Telnet and SNMP (v1, v2c and v3). Please amend for leading OEM to participate.	
60.	Annexure-II Technical Specifications, A .Active Equipment & Components, 4. Network Management System (NMS), Technical Specification S. No16	The NMS should support a single menu for discovery status, device status, user tracking, and inventory dashboards	Query-1 The NMS should support a single menu for discovery status, device status and inventory dashboards. User tracking is not a standard NMS/EMS feature. Please remove.  Query-2 The NMS should support a single menu for discovery status, device status and inventory dashboards. User tracking is not a standard NMS/EMS features. Please remove.	The clause may be read as: "The NMS should support a single menu for discovery status, device status and inventory dashboards".
61.	Annexure-II Technical Specifications, A .Active Equipment & Components, 4. Network Management System (NMS), Technical Specification S. No20	The NMS should support centralized fault and event browser (consolidated, syslog, traps, and events and alarms)	Query-1 The NMS should support centralized fault and event browser (consolidated, syslog, traps, and events and alarms) with minimum retention period of 6 month of more. Not all the NMS system retain the data by default for long, it is critical to mention that all logs should be retained for longer period which helps IT team accelerate troubleshooting.  Query-2 The NMS should support centralized fault and event browser (consolidated, syslog, traps, and events and alarms) with minimum retention period of 6 month of more. Not all the NMS system retain the data by default for long, it is critical to mention that all logs	The clause may be read as: "The NMS should support centralized fault and event browser (consolidated, syslog, traps, and events and alarms) with minimum retention period of 6 months".

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			should be retained for longer period which	
			helps IT team accelerate troubleshooting.	
			-	
			Query-3	
			The NMS should support centralized fault and	
			event browser (consolidated, syslog, traps,	
			and events and alarms) with minimum	
			retention period of 6 month of more. Not all	
			the NMS system retain the data by default for	
			· · · · · · · · · · · · · · · · · · ·	
			long, it is critical to mention that all logs	
			should be retained for longer period which	
			helps IT team accelerate troubleshooting.	
			Onomy 4	
			Query-4 The NMS should support Controllined foult	
			The NMS should support Centralized fault	
			and event browser centralized ,traps, and	
			events and alarms.	
			Query-5	
			The NMS should support centralized fault and	
			event browser (consolidated, traps, and events	
			and alarms). Please remove syslog as it is not a	
			standard NMS/EMS features. We	
			recommended to have a dedicated syslog	
			server	
62.	Annexure-II	The NMS should support configuration	Query-1	The clause stands deleted
	Technical	of location settings of switch ports to	Please remove as it OEM specific.	
	Specifications,	aid the provisioning and tracking of	Query-2	
	A .Active	Media endpoints.	Please remove as it OEM specific.	
	Equipment &		Query-3	
	Components, 4.		Please remove as it OEM specific.	
	Network		•	
	Management			
	System (NMS),			
	Technical			
	Specification S.			
L	Specification 5.			

	No28			
63.	Annexure-II Technical Specifications, A .Active Equipment & Components, 4. Network Management System (NMS), Technical Specification S. No30	The NMS should support rule-based device classification engine for Device Profiling	Query-1 Please remove this – the idea of having a rule –based device classification for profiling is vendor specific there is no standard library for profiling  Query-2 Please remove this – the idea of having a rule –based device classification for profiling is vendor specific there is no standard library for profiling.  Query-3 Please remove this – the idea of having a rule –based device classification for profiling is vendor specific there is no standard library for profiling.	The clause stands deleted
64.	Annexure-II Technical Specifications, A .Active Equipment & Components, 4. Network Management System (NMS), Technical Specification S. No32	The NMS should support creation of a Baseline template for configuration of devices	Query-1 The NMS should support creation of a baseline template using varios wizards for configuration of devices. These tools are generally provided in SLA monitoring and Helpdesk suites, kindly remove them.	No Change

65.	Annexure-II Technical Specifications, A .Active Equipment & Components, 4. Network Management	The NMS should support generation of a non-compliance configuration report against the Baseline template.	Query-1 The NMS should support generation of a non-compliance configuration report against the baseline template. These tools are generally provided in SLA monitoring and Helpdesk suites, kindly remove them.	No Change
	System (NMS), Technical Specification S. No33			
66.	Annexure-II Technical Specifications, A .Active Equipment & Components, 4. Network Management System (NMS), Technical Specification S. No40	The NMS should support Syslog report	Query-1 Please remove as it is a primarily a SIEM feature.  Query-2 Please remove as it is a primarily a SIEM feature.  Query-3 Please remove as it is a primarily a SIEM feature.	No Change
67.	Annexure-II Technical Specifications, A .Active Equipment & Components, 5 (i). Wireless LAN Controller/ Switch (WLC)- Type-1 Technical	WLC should be dedicated appliance with support for upto 100 Access points. Should be a standalone appliance in High Availability mode.	Query-1 WLC should be dedicated appliance with support for up to 70 Access points. Should be a standalone appliance in High Availability mode. if we categorize ,70 Aps would be good enough for small campuses and request to change the count to 70 instead of 100.  Query-2 WLC should be dedicated appliance with support for up to 70 Access points. Should be	The Clause may be read as: "WLC should be dedicated appliance with support for upto 100 Access points. Should be a standalone appliance and support high availability mode as and when required".

	Specification S. No2		a standalone appliance in High Availability mode. if we categorize ,70 Aps would be good enough for small campuses and request to change the count to 70 instead of 100.  Query-3  Qty of each controller is mentioned in RFP, request to clarify whether mentioned qty is including HA controller also or does bidder need to quote HA Controller separately as	
			mentioned in clause.	
68.	Annexure-II	WLC performance should remain the	Query-1	The clause stands deleted.
	Technical	same if encryption is on or off for	Please remove this. This feature is not support	
	Specifications,	wireless SSIDs.	by Cisco. Being the largest market share	
	A .Active		holder of share holder market, this point is	
	Equipment &		keeping us from competing in this esteemed	
	Components, 5		RFP.	
	(i). Wireless		Query-2	
	LAN Controller/ Switch (WLC)-		Please remove this. This feature is not support by Cisco. Being the largest market share	
	Type1 Technical		holder of share holder market, this point is	
	Specification S.		keeping us from competing in this esteemed	
	No9		RFP.	
69.	Annexure-II	WLC Should support Rogue AP	Query-1	The clause may be read as:
	Technical	detection, classification and standard	WLC Should support Rogue AP detection,	"WLC Should support Rogue
	Specifications,	WIPS signatures.	classification and standard WIPS. Request	AP detection, classification and
	A .Active		you to modify clause and remove signatures	standard WIPS".
	Equipment &		word.	
	Components, 5		Query-2	
	(i). Wireless		WLC Should support Rogue AP detection,	
	LAN Controller/ Switch (WLC)-		classification and standard WIPS. Request you to modify clause and remove signatures	
	Type1 Technical		word.	
	Specification S.		Query-3	
	No10		WLC Should support Rogue AP detection,	

			classification and standard WIPS. Request you to modify clause and remove signatures word.	
70.	Annexure-II Technical Specifications, A .Active Equipment & Components, 5 (i). Wireless LAN Controller/ Switch (WLC)- Type-1, Technical Specification S. No16	Should provide Mesh capability for Mesh supported AP.	Query-1 Please Remove Mesh capability for mesh supported AP or write Mesh / WDS. Mesh network are primarily use when deploying MAN (Metropolitan Area Network) there are no use of Mesh. Wireless backhauling can also be achieved through WDS.	No Change
71.	Annexure-II Technical Specifications, A .Active Equipment & Components, 5 (i). Wireless LAN Controller/ Switch (WLC)- Type1 Technical Specification S. No17	Must support client roaming across controllers separated by a layer 3 routed boundary.	Query-1 Request you to modify clause as required. Mostly Controllers are deployed in management VLAN (and in same datacentre). So roaming across the layer 3 boundary is not critical to have. This shall not have any impact on performance or objective of deployment.  Query-2 Request you to modify clause as required. Mostly Controllers are deployed in management VLAN (and in same datacenter). So roaming across the layer 3 boundary is not critical to have. This shall not have any	The clause may be read as: "Must support client roaming across controllers".

			Query-3 Request you to modify clause as required. Mostly Controllers are deployed in management VLAN (and in same datacenter). So roaming across the layer 3 boundary is not critical to have. This shall not have any impact on performance or objective of	
72.	Annexure-II Technical Specifications, A .Active Equipment & Components, 5 (i). Wireless LAN Controller/ Switch (WLC)- Type1 Technical Specification S. No20	Should provide a snapshot of air quality in terms of the performance and impact of interference on the wireless network identifying the problem areas.	Query-1 Request you to remove this clause. This clause is limiting leading OEM's in participation as supported by limited OEM's  Query-2 Request you to remove this clause. This clause is limiting leading OEM's in participation as supported by limited OEM's.  Query-3 Request you to remove this clause. This clause is limiting leading OEM's in clause is limiting leading OEM's in	The clause may be read as: "Should provide a snapshot of interference on the wireless network identifying the problem areas".
73.	Annexure-II Technical Specifications, A .Active Equipment & Components, 5 (i). Wireless LAN Controller/ Switch (WLC)- Type1 Technical	Should provide real-time charts showing interferers on a per-radio, per-channel basis	Query-1  "showing interference " in place of "showing interferers". Request you to modify the clause as RF analisys results shows as per radio and not interferers. Please change it so all leading OEM's can participate.  Query-2  "showing interference " in place of "showing interferers". Request you to modify the clause	No Change

	Specification S. No21		as RF analisys results shows as per radio and not interferers. Please change it so all leading OEM's can participate.  Query-3  "showing interference " in place of "showing interferers". Request you to modify the clause as RF analisys results shows as per radio and not interferers. Please change it so all leading	
			OEM's can participate.	
74.	Annexure-II Technical Specifications, A .Active Equipment & Components, 5 (i). Wireless LAN Controller/ Switch (WLC)- Type-2 Technical Specification S. No2	WLC should be dedicated appliance with support for upto 250 Access points. Should be a standalone appliance in High Availability mode	Query-1  WLC should be dedicated appliance with support for up to 500 Access points. Should be a standalone appliance in High Availability mode. if we categorize ,250 Aps would be good enough for medium size campuses and request to change the count to 500 instead of 250.  Query-2  WLC should be dedicated appliance with support for up to 500 Access points. Should be a standalone appliance in High Availability mode. if we categorize ,250 Aps would be good enough for medium size campuses and request to change the count to 500 instead of 250.  Query-3  Qty of each controller is mentioned in RFP, request to clarify whether mentioned qty is	The clause may be read as: "WLC should be dedicated appliance with support for upto 250 Access points. Should be a standalone appliance and support high availability mode as and when required".
			including HA controller also or does bidder need to quote HA controller separately as mentioned in clause.	

75.	Annexure-II	Should support coverage hole detection	Query-1	The clause may be read as:
	Technical	and correction that can be adjusted on a	Should support coverage hole detection and	"Should support coverage hole
	Specifications,	per WLAN basis	correction that can be adjusted on a per	detection and correction that
	A .Active		Access point basis. Request you to modify the	can be adjusted on a per Access
	Equipment &		clause as per controller 1. Coverage hole	point basis".
	Components, 5		detection and correction should be for each	
	(i). Wireless		radio irrespective of WLAN. this is correctly	
	LAN Controller/		mentioned in WLC 1 specification.	
	Switch (WLC)-			
	Type-2		Query-2	
	Technical		Should support coverage hole detection and	
	Specification S.		correction that can be adjusted on a per	
	No7		Access point basis. Request you to modify the	
			clause as per controller 1. Coverage hole	
			detection and correction should be for each	
			redio irrespective of WLAN . this is correctly	
			mentioned in WLC 1 specification.	
			Query-3	
			Should support coverage hole detection and	
			correction that can be adjusted on a per	
			Access point basis. Request you to modify the	
			clause as per controller 1. Coverage hole	
			detection and correction should be for each	
			redio irrespective of WLAN . this is correctly	
			mentioned in WLC 1 specification.	

76. Annexure Technica Specifica A .Active Equipme Compone (i). Wirel LAN Con Switch (V Type-2 Technica Specifica	same if encryptions, wireless SSIDs ent & ents, 5 ess entroller/VLC)-	by hole kee RF	Query-1 lease remove this. This feature is not support by Cisco. Being the largest market share colder of share holder market, this point is beeping us from competing in this esteemed FP.  Query-2 lease remove this. This feature is not support by Cisco. Being the largest market share colder of share holder market, this point is beeping us from competing in this esteemed FP	The clause stands deleted.
No9  77. Annexure Technica Specifica A .Active Equipme Compone (i). Wirel LAN Con Switch (Varype-2 Technica Specifica No10	e-II WLC Should detection, classiful with the wind wind with the wind wind with the wind wind with the wind wind wind with the wind wind wind wind with the wind wind wind wind wind wind wind wind	cla you wo WI cla you wo WI cla you	Query-1 VLC Should support Rogue AP detection, assification and standard WIPS. Request ou to modify clause and remove signature ord.  Query-2 VLC Should support Rogue AP detection, assification and standard WIPS. Request ou to modify clause and remove signature ord.  Query-3 VLC Should support Rogue AP detection, assification and standard WIPS. Request out to modify clause and remove signature ord.	The clause may be read as: "WLC Should support Rogue AP detection, classification and standard WIPS".

78.	Annexure-II	Should provide Mesh capability for	Query-1	No Change
	Technical Specifications, A .Active Equipment & Components, 5 (i). Wireless LAN Controller/ Switch (WLC)- Type-2 Technical Specification S. No16	Mesh supported AP.	Please Remove Mesh capability for mesh supported AP or write Mesh / WDS. Mesh network are primarily use when deploying MAN (Metropolitan Area Network) there are no use of Mesh. Wireless backhauling can also be achieved through WDS.	
79.	Annexure-II Technical Specifications, A .Active Equipment & Components, 5 (i). Wireless LAN Controller/ Switch (WLC)- Type-2 Technical Specification S. No17	Must support client roaming across controllers separated by a layer 3 routed boundary.	Must support client roaming across controllers. Request you to modify clause as required. Mostly Controllers are deployed in management VLAN (and in same datacenter). So roaming across the layer 3 boundary is not critical to have. This shall not have any impact on performance or objective of deployment.  Query-2  Must support client roaming across controllers. Request you to modify clause as required. Mostly Controllers are deployed in management VLAN (and in same datacenter). So roaming across the layer 3 boundary is not critical to have. This shall not have any impact on performance or objective of deployment.  Query-3  Must support client roaming across controllers. Request you to modify clause as required. Mostly Controllers are deployed in	The clause may be read as: "Must support client roaming across controllers".

			management VLAN (and in same datacenter). So roaming across the layer 3 boundary is not critical to have. This shall not have any impact on performance or objective of deployment.	
80.	Annexure-II Technical Specifications, A .Active Equipment & Components, 5 (i). Wireless LAN Controller/ Switch (WLC)- Type-2 Technical Specification S. No20	Should provide a snapshot of air quality in terms of the performance and impact of interference on the wireless network identifying the problem areas.	Query-1 Request you to remove this clause. This clause is limiting leading OEM's in participation as supported by limited OEM's.  Query-2 Request you to remove this clause. This clause is limiting leading OEM's in participation as supported by limited OEM's.  Query-3 Request you to remove this clause. This clause is limiting leading OEM's in participation as supported by limited OEM's.	The clause may be read as: "Should provide a snapshot of interference on the wireless network".
81.	Annexure-II Technical Specifications, A .Active Equipment & Components, 5 (i). Wireless LAN Controller/ Switch (WLC)- Type-2 Technical Specification S. No21	Should provide an Air Quality rating on a per- radio basis to help gauge the impact of interference on the network.	Query-1 Request you to remove this clause. This clause is limiting leading OEM's in participation as supported by limited OEM's.  Query-2 Request you to remove this clause. This clause is limiting leading OEM's in participation as supported by limited OEM's Query-3 Request you to remove this clause. This clause is limiting leading OEM's in participation as supported by limited OEM's	The clause stands deleted.

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82.	Annexure-II	Should provide real-time charts	Query-1	The clause may be read as:
	Technical	showing interferers per access point ,on	"showing interference" in place of "showing interference". Pagaget you to madify the places	"Should provide real-time
	Specifications,	a per-radio, per channel basis	interferers". Request you to modify the clause	charts showing interferers on a
	A .Active		as RF analisys results shows as per radio and	per radio, per channel basis".
	Equipment &		not interferers. Please change it so all leading	
	Components, 5		OEM's can participate.	
	(i). Wireless		0 1	
	LAN Controller/		Query-2	
	Switch (WLC)-		"showing interference" in place of "showing	
	Type-2		interferers". Request you to modify the clause	
	Technical		as RF analisys results shows as per radio and	
	Specification S.		not interferers. Please change it so all leading	
	No22		OEM's can participate.	
			Query-3	
			"showing interference" in place of "showing	
			interferers". Request you to modify the clause	
			as RF analisys results shows as per radio and	
			not interferers. Please change it so all leading	
			OEM's can participate.	
83.	Annexure-II	WLC should be dedicated appliance	Query-1	The Clause may be read as:
	Technical	with support for upto 500 Access	WLC should be dedicated appliance with	"WLC should be dedicated
	Specifications,	points. Should be a standalone	support for up to 1500 Access points. Should	appliance with support for upto
	A .Active	appliance in High Availability mode.	be a standalone appliance in High Availability	500 Access points. Should be a
	Equipment &		mode. if we categorize ,500 Aps would be	standalone appliance and
	Components, 5		good enough for large size campuses and	support high availability mode
	(i). Wireless		request to change the count to 1500 instead of	as and when required".
	LAN Controller/		500	_
	Switch (WLC)-		Query-2	
	Type-3		WLC should be dedicated appliance with	
	Technical		support for up to 1500 Access points. Should	
	Specification S.		be a standalone appliance in High Availability	
	No2		mode. if we categorize ,500 Aps would be	
			good enough for large size campuses and	
			request to change the count to 1500 instead of	

			500.	
			Query-3	
			Qty of each controller is mentioned in RFP,	
			request to clarify whether mentioned qty is	
			including HA controller also or does bidder	
			need to quote HA controller separately as	
			mentioned in clause.	
84.	Annexure-II	Should support coverage hole detection	Query-1	The clause may be read as:
04.	Technical	and correction that can be adjusted on a	Should support coverage hole detection and	"Should support coverage hole
	Specifications,	per WLAN basis.	correction that can be adjusted on a per	detection and correction that
	A .Active	per WLAN basis.	Access point basis. Request you to modify the	can be adjusted on a per Access
				point basis".
	Equipment &		clause as per controller 1. Coverage hole	point basis .
	Components, 5		detection and correction should be for each	
	(i). Wireless		redio irrespective of WLAN . this is correctly	
	LAN Controller/		mentioned in WLC 1 specification.	
	Switch (WLC)-			
	Type-3		Query-2	
	Technical		Should support coverage hole detection and	
	Specification S.		correction that can be adjusted on a per	
	No7		Access point basis. Request you to modify the	
			clause as per controller 1. Coverage hole	
			detection and correction should be for each	
			redio irrespective of WLAN. this is correctly	
			mentioned in WLC 1 specification.	
			•	
1			Query-3	
			Should support coverage hole detection and	
			correction that can be adjusted on a per	
			Access point basis. Request you to modify the	
			clause as per controller 1. Coverage hole	
			detection and correction should be for each	
			redio irrespective of WLA . this is correctly	
			_ <u>*</u>	
			mentioned in WLC 1 specification.	

85.	Annexure-II	WLC performance should remain the	Query-1	The clause stands deleted.
	Technical	same if encryption is on or off for	Please remove this. This feature is not support	The charge stands defected.
	Specifications,	wireless SSIDs.	by Cisco. Being the largest market share	
	A .Active		holder of share holder market, this point is	
	Equipment &		keeping us from competing in this esteemed	
	Components, 5		RFP.	
	(i). Wireless		Query-2	
	LAN Controller/		Please remove this. This feature is not support	
	Switch (WLC)-		by Cisco. Being the largest market share	
	Type-3		holder of share holder market, this point is	
	Technical		keeping us from competing in this esteemed	
	Specification S.		RFP	
	No9			
86.	Annexure-II	WLC Should support Rogue AP	Query-1	The clause may be read as:
00.	Technical	detection, classification and standard	WLC should support Rogue AP detection,	"WLC Should support Rogue
	Specifications,	WIPS signatures	classification and standard WIPS. Request	AP detection, classification and
	A .Active	Wil 5 signatures	you to modify clause and remove signature	standard WIPS".
	Equipment &		word	Standard WHS.
	Components, 5		Query-2	
	(i). Wireless		WLC should support Rogue AP detection,	
	LAN Controller/		classification and standard WIPS. Request	
	Switch (WLC)-		you to modify clause and remove signature	
	Type-3		word.	
	Technical		Query-3	
	Specification S.		WLC should support Rogue AP detection,	
	No10		classification and standard WIPS. Request	
			you to modify clause and remove signature	
			word.	
87.	Annexure-II	Should provide Mesh capability for	Query-1	No Change
	Technical	Mesh supported AP.	Please Remove Mesh capability for mesh	
	Specifications,		supported AP or write Mesh / WDS. Mesh	
	A .Active		network are primarily use when deploying	
	Equipment &		MAN (Metropolitan Area Network) there are	
	Components, 5		no use of Mesh. Wireless backhauling can	

	(i). Wireless LAN Controller/Switch (WLC)-Type-3 Technical Specification S. No16		also be achieved through WDS.	
88.	Annexure-II Technical Specifications, A .Active Equipment & Components, 5 (i). Wireless LAN Controller/ Switch (WLC)- Type-3 Technical Specification S. No17	Must support client roaming across controllers separated by a layer 3 routed boundary.	Query-1  Must support client roaming across controllers. Request you to modify clause as required. Mostly Controllers are deployed in management VLAN (and in same datacenter). So roaming across the layer 3 boundary is not critical to have. This shall not have any impact on performance or objective of deployment.  Query-2  Must support client roaming across controllers. Request you to modify clause as required. Mostly Controllers are deployed in management VLAN (and in same datacenter). So roaming across the layer 3 boundary is not critical to have. This shall not have any impact on performance or objective of deployment.  Query-3  Must support client roaming across controllers. Request you to modify clause as required. Mostly Controllers are deployed in management VLAN (and in same datacenter). So roaming across the layer 3 boundary is not critical to have. This shall not have any impact on performance or objective of deployment.	The clause may be read as: "Must support client roaming across controllers".

89.	Annexure-II Technical Specifications, A .Active Equipment & Components, 5 (i). Wireless LAN Controller/ Switch (WLC)- Type-3 Technical Specification S. No20	Should provide a snapshot of air quality in terms of the performance and impact of interference on the wireless network identifying the problem areas.	Query-1 Request you to remove this clause. This clause is limiting leading OEM's in participation as supported by limited OEM's.  Query-2 Request you to remove this clause. This clause is limiting leading OEM's in participation as supported by limited OEM's.  Query-3 Request you to remove this clause. This clause is limiting leading OEM's in participation as supported by limited OEM's.	The clause may be read as: "Should provide a snapshot of interference on the wireless network identifying the problem areas".
90.	Annexure-II Technical Specifications, A .Active Equipment & Components, 5 (i). Wireless LAN Controller/ Switch (WLC)- Type-3 Technical Specification S. No21	Should provide an Air Quality rating on a per- radio basis to help gauge the impact of interference on the network	Query-1 Request you to remove this clause. This clause is limiting leading OEM's in participation as supported by limited OEM's Query-2 Request you to remove this clause. This clause is limiting leading OEM's in participation as supported by limited OEM's Query-3 Request you to remove this clause. This clause is limiting leading OEM's in participation as supported by limited OEM's.	The clause stands deleted.
91.	Annexure-II Technical Specifications, A .Active Equipment & Components, 5 (i). Wireless LAN Controller/ Switch (WLC)-	Should provide real-time charts showing interferers per access point, on a per-radio, per channel basis.	Query-1  "showing interference "in place of "showing interferers". Request you to modify the clause as RF analysis results shows as per radio and not interferers. Please change it so all leading OEM's can participate  Query-2  "showing interference "in place of "showing interferers". Request you to modify the clause	The clause may be read as: "Should provide real-time charts showing interferers on a per radio, per channel basis".

	Type-3 Technical Specification S. No22		as RF analysis results shows as per radio and not interferers. Please change it so all leading OEM's can participate  Query-3  "showing interference" in place of "showing interferers". Request you to modify the clause as RF analysis results shows as per radio and not interferers. Please change it so all leading OEM's can participate	
92.	Annexure-II Technical Specifications, A .Active Equipment & Components, 6. Wireless Access Points (WAP) Technical Specification, Indoor Wireless Acess Point S. No2	Access point must have minimum two Ethernet port.	Query-1 Access point must have minimum two Ethernet port. Along with the dedicated console port .Access point should have console port, because that required for remote troubleshooting.  Query-2 Access point must have minimum two Ethernet port. Along with the dedicated console port .Access point should have console port, because that required for remote troubleshooting.  Query-3 Two Ethernet port are not having any significance in indoor AP's and increase overall cost of project. Considering outdoor AP specification as well which has One Ethernet port it is requested to amend the clause "Access point must have minimum one Ethernet port."	No Change

93.	Annexure-II	Must support minimum 3x3 multiple-	Query-1	No Change
	Technical	input multiple-output (MIMO) with		
	Specifications,	three spatial streams	Must support minimum 4x4 multiple-input	
	A .Active	_	multiple-output (MIMO) with three spatial	
	Equipment &		streams. The latest on the technology we have	
	Components, 6.		802.11 ac, Wave 2, 4x4MIMO Radios, so	
	Wireless Access		request to please change it to the latest	
	Points (WAP)		protocol available by IEEE	
	Technical			
	Specification,		Query-2	
	Indoor Wireless		Must support minimum 4x4 multiple-input	
	Acess Point		multiple-output (MIMO) with three spatial	
	S. No3		streams. The latest on the technology we have	
			802.11 ac, Wave 2, 4x4MIMO Radios, so	
			request to please change it to the latest	
			protocol available by IEEE	
94.	Annexure-II	Must support simultaneous 802.11n on	Query-1	No Change
	Technical	the 2.4 GHz and 802.11ac on the 5 GHz	Must support simultaneous 802.11n on the 2.4	
	Specifications,	radios.	GHz and 802.11ac, wave 2 on the 5 GHz	
	A .Active		radios. The latest on the technology we have	
	Equipment &		802.11 ac, Wave 2, 4x4MIMO Radios, so	
	Components, 6.		request to please change it to the latest	
	Wireless Access		protocol available by IEEE.	
	Points (WAP)			
	Technical		Query-2	
	Specification,		Must support simultaneous 802.11n on the 2.4	
	Indoor Wireless		GHz and 802.11ac, wave 2 on the 5 GHz	
	Acess Point		radios. The latest on the technology we have	
	S. No4		802.11 ac, Wave 2, 4x4MIMO Radios, so	
			request to please change it to the latest	
			protocol available by IEEE.	

95.	Annexure-II	Must support data rates upto 1.3 Gbps	Query-1	No Change
75.	Technical	on 5 Ghz radio and 450 Mbps on 2.4	Must support data rates up to 1.7 Gbps on 5	140 Change
	Specifications,	Ghz.	GHz radio and 450 Mbps on 2.4 GHz. The	
	A .Active	GIIZ.	latest on the technology we have 802.11 ac,	
	Equipment &		Wave 2, 4x4MIMO Radios, so request to	
	Components, 6.		please change it to the latest protocol	
	Wireless Access		available by IEEE.1.7 Gbps is the upgraded	
	Points (WAP)		throughput been supported by AP now.	
	Technical		unoughput been supported by M now.	
	Specification,		Query-2	
	Indoor Wireless		Must support data rates up to 1.7 Gbps on 5	
	Acess Point		GHz radio and 450 Mbps on 2.4 GHz. The	
	S. No5		latest on the technology we have 802.11 ac,	
	S.110. 2		Wave 2, 4x4MIMO Radios, so request to	
			please change it to the latest protocol	
			available by IEEE.1.7 Gbps is the upgraded	
			throughput been supported by AP now	
			an oughput com supported by the notion	
96.	Annexure-II	Must support minimum 21 dbm of	Query-1	No Change
	Technical	transmit power for both 2.4 and 5 Ghz	Must support minimum 23 dbm of transmit	
	Specifications,	radios, (EIRP limited as per WPC	power for both 2.4 and 5 Ghz radios (EIRP	
	A .Active	regulations)	limited as per WPC regulations). Request you	
	Equipment &	,	to increase transmit power of AP's for better	
	Components, 6.		performance.	
	Wireless Access			
	Points (WAP)		Query-2	
	Technical		Must support minimum 23 dbm of transmit	
	Specification,		power for both 2.4 and 5 Ghz radios (EIRP	
	Indoor Wireless		limited as per WPC regulations). Request you	
	Acess Point		to increase transmit power of AP's for better	
	S. No7		performance.	
			0	
			Query-3 Must support minimum 23 dbm of transmit	
1	1	1	I IVIUSI SUPPORT MINIMIIM 23 APM OF Transmif	1
			power for both 2.4 and 5 Ghz radios (EIRP	

			limited as per WPC regulations). Request you to increase transmit power of AP's for better performance	
97.	Annexure-II Technical Specifications, A .Active Equipment & Components, 6. Wireless Access Points (WAP) Technical Specification, Indoor Wireless Access Point S. No9	Should support configuring the access point as network connected sensor to access any network location covered by the access point to get real-time Spectrum analysis data.	Query-1 Should support spectrum analysis. Request you to modify clause.  Query-2 Should support spectrum analysis. Request you to modify clause Query-3 Should support spectrum analysis. Request you to modify clause	The clause may be read as: "Should support access point to get real-time spectrum analysis data".
98.	Annexure-II Technical Specifications, A .Active Equipment & Components, 6. Wireless Access Points (WAP) Technical Specification, Indoor Wireless Acess Point S. No11	Must incorporate radio resource management for power, channel, coverage hole detection and performance optimization.	Query-1 Request you to remove this clause  Query-2 Request you to remove this clause  Query-3 Request you to remove this clause	The clause may be read as: "Must incorporate radio resource management".
99.	Annexure-II Technical Specifications, A .Active Equipment &	Should support mesh capabilities for temporary connectivity in areas with no Ethernet cabling.	Query-1 Please Remove Mesh capability for mesh supported AP or write Mesh / WDS. Mesh network are primarily use when deploying MAN (Metropolitan Area Network) there are	No Change

100.	Components, 6. Wireless Access Points (WAP) Technical Specification, Indoor Wireless Acess Point S. No18 Annexure-II Technical Specifications, A.Active Equipment & Components, 6. Wireless Access Points (WAP) Technical Specification, Indoor Wireless Acess Point S. No21	Must support Power over Ethernet, local power and power injectors. Should be provided with power adapter.	Query-1  Since PoE and local power are given as either option of the power source, proving a power adaptor as a mandate is not relevant. Request to kindly remove or relax this clause.	The new line item has been added at annexure-I (Bill of Material) A. Active Equipment and components, Access Switch (non-POE) as Serial no. 4(D). "Power Injector for non-PoE switch – Quantity is 106".
101.	Annexure-II Technical Specifications, A .Active Equipment & Components, 6. Outdoor Wireless Access Points (WAP) Technical Specification S. No2	Access point must have minimum one Ethernet port.	Query-1  Access point must have one RJ-45 Ethernet port along with SFP/SFP+ Port for the fiber support, and a dedicated console port. having directed fiber connection to the AP is required for long distance wired connection support and should have a console port because that is required for remote troubleshooting.  Query-2  Access point must have one RJ-45 Ethernet port along with SFP/SFP+ Port for the fiber	The clause may be read as: "Access point must have minimum one Ethernet port along with SFP / SFP+ port for fibre connection".

			support, and a dedicated console port .having directed fiber connection to the AP is required for long distance wired connection support and should have a console port because that is required for remote troubleshooting.	
102.	Annexure-II Technical Specifications, A .Active Equipment & Components, 6. Outdoor Wireless Access Points (WAP) Technical Specification S. No3	Must support minimum 2 x 2 multiple-input multiple-output (MIMO) with three spatial streams	Query-1  Must support minimum 2 x 2 multiple-input multiple-output (MIMO) with two spatial streams.2x2 MIMO cannot support three spatial streams  Query-2  Must support minimum 2 x 2 multiple-input multiple-output (MIMO) with two spatial streams.2x2 MIMO cannot support three spatial streams	The clause may be read as: "Must support minimum 2 x 2 multiple-input multiple-output (MIMO) with two spatial streams".
103.	Annexure-II Technical Specifications, A .Active Equipment & Components, 6. Outdoor Wireless Access Points (WAP) Technical Specification S. No4	Must support simultaneous 802.11n on the 2.4 GHz and 802.11ac on the 5 GHz radios	Query-1 Must support simultaneous 802.11n on the 2.4 GHz and 802.11ac, wave 2 on the 5 GHz radios. The latest on the technology we have 802.11 ac, Wave 2, 4x4MIMO Radios, so request to please change it to the latest protocol available by IEEE  Query-2 Must support simultaneous 802.11n on the 2.4 GHz and 802.11ac, wave 2 on the 5 GHz radios. The latest on the technology we have 802.11 ac, Wave 2, 4x4MIMO Radios, so request to please change it to the latest protocol available by IEEE	No Change
104.	Annexure-II Technical Specifications,	Must support minimum 21 dbm of transmit power for both 2.4 and 5 Ghz radios, (EIRP limited as per WPC	Query-1  Must support minimum 28 dbm of transmit	No Change

105.	Annexure-II	WAP should have the technology to	Query-1	The clause may be read as:
1000	Technical	improve downlink performance to all	WAP should have the technology to improve	"WAP should have the
	Specifications,	mobile devices including one-, two-,	downlink performance to all mobile devices	technology to improve
	A .Active	and three spatial stream devices on	including one-and two- spatial stream devices	downlink performance to all
	Equipment &	802.11n. The technology should use	on 802.11n. The technology should use	mobile devices including one-
	Components, 6.	advanced signal processing techniques	advanced signal processing techniques and	and two- spatial stream devices
	Outdoor	and multiple transmit paths to optimize	multiple transmit paths to optimize the signal	on 802.11n. The technology
	Wireless Access	the signal received by 802.11 clients in	received by 802.11 clients in the downlink	should use advanced signal
	Points (WAP)	the downlink direction without	direction without requiring feedback and	processing techniques and
	Technical	requiring feedback and should work	should work with all existing 802.11 clients.	multiple transmit paths to
	Specification S.	with all existing 802.11 clients.	2x2 MIMO cannot support three spatial	optimize the signal received by
	No8		streams.	802.11 clients in the downlink
			Query-2	direction without requiring
			WAP should have the technology to improve	feedback and should work with
			downlink performance to all mobile devices	all existing 802.11 clients".
			including one-and two- spatial stream devices	
			on 802.11n. The technology should use	
			advanced signal processing techniques and	
			multiple transmit paths to optimize the signal	
			received by 802.11 clients in the downlink	
			direction without requiring feedback and	
			should work with all existing 802.11 clients.	
			2x2 MIMO cannot support three spatial	
106		No. 1	streams.	
106.	Annexure-II	Must support Power over Ethernet /	Query-1	The new line item has been
	Technical	local power and power injectors.	Classes in relative from DOE assessed as AD's	added at annexure-I (Bill of
	Specifications,	Should be provided with power adapter	Clause is asking for POE support on AP's	Material) A. Active Equipment
	A .Active		also switch are asked with POE capability.	and components, Access Switch
	Equipment & Components, 6.		Please clarify whether we need to supply POE	( non-POE) as Serial no. 4(D). "Power Injector for non-PoE
	Outdoor		injector with every Access point and also power Adapter too, alternatively as AP will	switch – Quantity is 106".
	Wireless Access		be powered by POE switch so.	switch – Qualitity is 100.
	Points (WAP)		be powered by I OE switch so.	
	Technical			
	Specification S.			
	specification 3.			

	No22			
107.	Annexure-II Technical Specifications, A .Active Equipment & Components, 7. Firewall, Technical Specification, S. No20	The product should be EAL certified of common criteria or NDPP or equivalent.	Query-1 Kindly remove this clause. The latest products in the market have been released by OEMs across the board the newer product take time to get certified and therefore to ensure that the latest products compete in the RFP from a security perspective ,request you to kindly remove the clause.  Query-2 Kindly remove this clause. The latest products in the market have been released by OEMs across the board the newer product take time to get certified and therefore ,to ensure that the latest products compete in the RFP from a security perspective ,request you to kindly	No Change
108.	Annexure-II Technical Specifications, A .Active Equipment & Components, 8. Intrusion Prevention System (IPS), Technical Specification, S. No1	IPS should be dedicated appliance based with inspected Throughput should be minimum of 10 Gbps. IPS should provide scalability of atleast 50% of the throughput asked for. The IPS throughput specified should not decrease in case of DDOS scenario.	Query-1 IPS should be dedicated appliance based with inspected Throughput should be minimum of 10 Gbps. IPS should provide scalability of at least 50% of the throughput asked for. The main function of an IPS is to protect the network against network threat .DDoS is not the primary functionality of in IPS. Therefore, request you to remove the DDoS clause from the IPS specification. If DDoS is a major concern, we would be happy to provide further collateral information on DDoS protection solution available in the market.  Query-2 IPS should be dedicated appliance based with inspected Throughput should be minimum of	The clause may be read as: "IPS should be dedicated appliance based with inspected Throughput should be minimum of 10 Gbps. IPS should provide scalability of atleast 50% of the throughput asked for".

			10 Gbps. IPS should provide scalability of at least 50% of the throughput asked for. The	
			main function of an IPS is to protect the	
			network against network threat .DDoS is not	
			the primary functionality of in IPS. Therefore,	
			request you to remove the DDoS clause from	
			the IPS specification. If DDoS is a major	
			concern, we would be happy to provide	
			further collateral information on DDoS	
			protection solution available in the market	
109.		It should support active/passive,	Query-1	The clause may be read as: "It
	Technical	active/active, Symmetric &	Kindly remove this Clause .These	should support active/passive,
	Specifications,	Asymmetric HA without any 3rd party	specification are specific to the OEM only	active/active, Symmetric &
	A .Active	load balancers.	and therefore restrict all other, including	Asymmetric HA".
	Equipment &		Cisco, from competing in this RFP.	
	Components, 8.		Therefore, in the interest of an open and	
	Intrusion		completive RFP, request you to kindly	
	Prevention (IDS)		remove this clause.	
	System (IPS), Technical		Onomy 2	
	Specification,		Query-2 Kindly remove this Clause .These	
	S. No14		specification are specific to the OEM only	
	5.110.14		and therefore restrict all other, including	
			Cisco, from competing in this RFP.	
			Therefore, in the interest of an open and	
			completive RFP, request you to kindly	
			remove this clause.	
110.	Annexure-II	While in HA, all the segments/ports	Query-1	The clause stands deleted.
	Technical	should be available for inline protection		
	Specifications,	& all synchronization should be done	While in HA, all the segments/ports should be	
	A .Active	over the out of the band management	available for inline protection. The	
	Equipment &	port, not sacrificing the inline ports	maintenance of the stateful syn is dependent	
	Components, 8.		on majorly the firewall and IPS is dedicated	
	Intrusion		for threat mitigation. Therefore, this point is	
	Prevention		not entirely relevant for this product category.	

	System (IPS), Technical Specification, S. No15		Query-2 While in HA, all the segments/ports should be available for inline protection. The	
			maintenance of the stateful syn is dependent on majorly the firewall and IPS is dedicated for threat mitigation. Therefore, this point is not entirely relevant for this product category.	
111.	Annexure-II Technical Specifications, A .Active Equipment & Components, 8. Intrusion Prevention System (IPS), Technical Specification, S. No21	The product should be EAL certified of common criteria or NDPP or equivalent	Query-1 Will the NSS report be considered for the equivalent report? Nss is a third party organization which evaluates security products for all leading OEMs .NSS report are widely considered as the most technically precise certification for security products.  Query-2 Will the NSS report be considered for the equivalent report? .Nss is a third party organization which evaluates security products for all leading OEMs .NSS report are widely considered as the most technically precise certification for security products.	No Change
112.	Annexure-II Technical Specifications, A .Active Equipment & Components, 9.Unified threat management (UTM) , General Feature, S. No2	Equipment should support 2,00,000 or more number of new connection per second.	Query-1 Please reduce this to 100000. The firewall throughput asked is 8 GbPS 2L new sessions are too high WRT to asked throughput.	No Change

113.	Annexure-II Technical Specifications, A .Active Equipment & Components,	Equipment should support 6 million or more number of concurrent connection /session	Query-1 Please reduce this to 1.25mil The firewall throughput asked is 8 GbPS. 6 mil new sessions are too high WRT to asked throughput.	No Change
	9.Unified threat management (UTM) , General Feature, S. No3			
114.	Annexure-II Technical Specifications, A .Active Equipment & Components, 9.Unified threat management (UTM) , General Feature, S. No 7	Equipment should support 1024 VLAN	Query-1 Please reduce this to 512. VLAN is a layer 3 feature and should be taken care by L3 switch, UTM should not be loaded with layer 3 features.	No Change
115.	Annexure-II Technical Specifications, A .Active Equipment & Components, 9.Unified threat management (UTM) ,General Feature,	The proposed solution must support 3 Gbps throughput	Query-1  As per clause No. "Equipment should support 8 Gbps or more Firewall throughput" clause no 9 is not relevant / duplicate clause, request to remove this.	No Change

	S. No9			
116.	Technical Specifications, A .Active Equipment & Components, 9.Unified threat management (UTM), Administration, Authentication & General Configuration, S. No2	Equipment must support user/ip/mac binding functionality to map username with IP address & MAC address.	Query-1 Please amend this to IP or MAC. Mapping IP with MAC is the general best practice followed up by the industry, this is vendor specific.	No Change
117.	Annexure-II Technical Specifications, A .Active Equipment & Components, 9.Unified threat management (UTM), VPN, S. No4	Equipment should support external certificate authorities and export facility of Client-to-site configuration for hassle free VPN configuration in remote Laptop/Desktop. It should also support commonly available IPSec VPN clients.	Query-1 Please remove this. Sonicwall doesn't support integrating with open source or third party softwares due to security reasons	No Change
118.	Annexure-II Technical Specifications, A .Active Equipment & Components, 9.Unified threat management	Equipment should have an appliance reporting with minimum 200 GB storage or external reporting system based on user (not on IP basis). If reporting system is external, hardware needs to be quoted separately .	Query-1 Today all educational institute store minimum 6 month of logs for forensics. Considering storage of 6 months, it is suggested to increase the capacity of reporting solution from 200GB to at least 1 TB capacity.	No Change

	(LITM) Lagging			
	(UTM), Logging			
	and Reporting,			
	S. No1			
119.		The proposed solution should be able to	Query-1	No Change
	Technical	provide detailed reports about all mails		
	Specifications,	passing through the firewall.	Please remove this. This is dedicated e-mail	
	A .Active		security feature not an UTM feature more	
	Equipment &		over anti spam service on UTM is also not	
	Components,		asked.	
	9.Unified threat			
	management			
	(LITM)			
	Logging and			
	Reporting, S.			
	No10			
120.		The proposed solution must work as	Onour 1	No Change
120.	Technical	The proposed solution must work as	Query-1	No Change
		Standalone HTTP proxy.	Please remove this. This is vendor specific	
	Specifications,		term, moreover proxy is 3rd gen which can be	
	A .Active		easily bypassed, where in working in gateway	
	Equipment &		mode reduces risk of breach.	
	Components,			
	9.Unified threat			
	management			
	(UTM)			
	, Web content			
	and Application			
	filtering,			
	S. No2			

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121.	Annexure-II	The proposed solution must have more	Query-1	No Change
	Technical	than 75 web categories	Please reduce this to 54. This is vendor	
	Specifications,		specific number, plz neutralise this to 50+	
	A .Active			
	Equipment &			
	Components,			
	9.Unified threat			
	management			
	(UTM),Web			
	content and			
	Application			
	filtering,			
	S. No3			
122.	Annexure-II	The proposed solution should have	Query-1	The clause may be read as:
	Technical	7000+ signature database and should	Please reduce this to 5000+ This number	"The proposed solution should
	Specifications,	able to inspect SSL base traffic	mentioned is vendor specific, we have approx	have 5000+ signature database
	A .Active		5 mil signatures on cloud.	and should able to inspect SSL
	Equipment &		2 mil 218.mon es en e10 mil	base traffic".
	Components,			suse traffic .
	9.Unified threat			
	management			
	(UTM), IPS,			
	(OTM), IPS, S. No3			
	S. NO3			
123.	Annexure-II	Passive Solution should be upgradable	Query-1	No Change
125.	Technical	to intelligent solution through same	Request you to remove the clause. Intelligent	110 Change
	Specifications,	make without changing existing	network requires change of complete	
	A .Active	Information Outlet & Patchcords.	hardware again. Thus making passive	
		information Outlet & Fatchcords.		
	Equipment &		infrastructure ready is irrelevant.	
	Components,		0	
	11. (iii) UPS		Query-2	
	1KVA, 14.		Intelligent network requires change of	
	Customer		complete hardware again. Thus making	
	Premises Radio		passive infrastructure ready is irrelevant. So	
	for 25 Mbps		please remove this clause.	

	Aggregate Throughput B. Passive Components, S. No8		Query-3 Intelligent solution is always depend on the OEM to OEM. The end node connectivity is never change. It is solution oriented approch not the product oriented.  Query-4 Intelligent network requires change of complete hardware again. Thus making passive infrastructure ready is irrelevant.	
124.	Annexure-II Technical Specifications, A .Active Equipment & Components, 11. (iii) UPS 1KVA, 14. Customer Premises Radio for 25 Mbps Aggregate Throughput B. Passive Components , S. No9	The Information Outlet Should have Shutter with Spring loaded mechanism, and also should have feature as IDC V-Shaped Contacts	Query-1 The Information Outlet / faceplate should have shutter mechanism. "spring loaded shuttered" is proprietary Molex nomenclature. Not offered by any other OEM. Shutter mechanism can be asked in either IO or faceplate  Query-2  "spring loaded shuttered" is proprietary Molex nomenclature. Not offered by any other OEM. Shutter mechanism can be asked in either IO or faceplate.  Query-3  Spring shutters come with I/O & face plate. We propose shutter on face plate.  Query-4  "Spring loaded shuttered" is proprietary Molex nomenclature. Not offered by any other OEM. Shutter mechanism can be asked in either IO or faceplate.	The clause may be read as: "The Information Outlet Should have Shutter or hinged dust cover mechanism and also should have feature as IDC V-Shaped Contacts".
125.	Annexure-II Technical	meet or Exceed EIA/TIA 568B2.1 CAT 6 Specifications. The Cable should be	Query-1	No Change

for 25 Mbps Aggregate Throughput B. Passive Components S. No13			
Technical ports Specifications, for un A .Active into a Equipment & should Components, the powder 11. (iii) UPS Powder 1KVA, 14. and le Customer Spring	Patch panel shall be available in 24 configurations in one Rack Unit ashielded installation and shall fit 19" size. Rear cable management d only occupy the same area as panel. Should be made of ercoated CRS (Cold Rolled Steel) oaded with Datagate Jacks with g Loaded Shutter. Should Comply 863 & CSA C22.2	Query-1 The patch panel shall be available in 24 ports configuration in one rack unit for unshielded installation and shall fit into a 19" size. Rear cable management should only occupy the same area as the panel. "Datagare jack" and "spring loaded structured" is proprietary Molex nomenclature. Not offered by any other OEM. Shutter mechanism can be asked in either IO or faceplate. Request to amend the clause.  Query-2 "Data gate jack " and "spring loaded shuttered" is proprietary Molex nomenclature. Not offered by any other OEM. Shutter mechanism can be asked in either IO or faceplate.  Query-3	The Patch panel shall be available in 24 ports configurations in one Rack Unit for unshielded installation and shall fit into a 19" size. Rear cable management should only occupy the same area as the panel. Should be made of Powdercoated CRS (Cold Rolled Steel) and Shutter or hinged dust cover. Should Comply UL 1863 & CSA C22.2

127.	Annexure-II	The 19" rack mount high quality	shutters are not required on patch panel I/O, We propose additional blank module for free/empty ports. Panel should be UL and ETL Verified.  Query-4  "Data gate jack" and "spring loaded shuttered" is proprietary Molex nomenclature. Not offered by any other OEM. Shutter mechanism can be asked in either IO or faceplate.	Evnlanation of the clause
127.	Annexure-II Technical Specifications, A .Active Equipment & Components, 11. (iii) UPS 1KVA, 14. Customer Premises Radio for 25 Mbps Aggregate Throughput B. Passive Components, S. No15	The 19" rack mount, high quality enclosure fibre termination unit LIU should be made of CRS – Cold Rolled Steel And Should accept SC/ST, MTRJ, LCadapters, etc. Should have Wall & Rack accommodation. Rear, Side & Base access for incoming/outgoing Backbone cables.	Query-1 Same device can not be have Wall & Rack mount. Kindly amend with only Rack Mount. And LIU has to be mount into Rack hence it better if it is light weight. Request to amend with LIU material CRS / Power coated Aluminium alloy.	Explanation of the clause: "Additional L brackets can be provided for making LIU as wall mount".

128.	Annexure-II	12 Core fibre Outdoor Armored Fibre	Query-1	No Change
	Technical	should be Gelly Filled, Cush	12 Core fiber Outdoor Armored Fiber should	_
	Specifications,	Resistance: Should have Steel wires.	be jelly filled, Crush Resistance : should have	
	A .Active	Should have LSZH outer sheath with	stell wires / Steel tape. Should have LSZH	
	Equipment &	Fire Retardant properties.	outer sheath with Fire Retardant Properties.	
	Components,		Request to amend the clause. Steel wires /	
	11. (iii) UPS		Steel tape.	
	1KVA, 14.			
	Customer		Query-2	
	Premises Radio		Steel wires / Steel tape	
	for 25 Mbps			
	Aggregate		Query-3	
	Throughput		As per Industry trend use FRP Rods instead	
	B. Passive		of Steel wire. FRP Rods are having heigher	
	Components ,		strength compare to steel material. Request to	
	S. No17		amend the FRP Rods / Steel wire.	
			Outdoor Fiber do not require the LSZH sheath	
			as per the standard. LSZH is recommended	
			for indoor installation. In Outdoor LSZH, will	
			not provide any value add but it can increase	
			the Fiber Cable cost very high.	
			Query-4	
			Steel wires/ Steel tape.	
			Steer whes, Steer tape.	
			Query-5	
			12 core fibre Outdoor Armored Fibre should	
			be Gelly Filled, Cush Resistance: Should	
			have Steel wires/steel Tape. Should have	
			LSZH outer sheath with Fire Retardant	
			properties. Request to amend the clause. Steel	
			wires / Steel tape.	

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129.	Annexure-II	The bidder shall provide a 25 years	Query-1	No Change
	Technical	industry standards compliance		
	Specifications,	warranty, the 25year Performance	25 Year performance warranty policies are	
	A .Active	warranty shall cover product	differ OEM to OEM. Labour Cost is always a	
	Equipment &	manufacturing defects for all passive	partner scope not the OEM. Request to amend	
	Components,	Structured Cabling System as well as	the same.	
	11. (iii) UPS	components. Labor cost should also be		
	1KVA, 14.	part of OEM Performance warranty.		
	Customer			
	Premises Radio			
	for 25 Mbps			
	Aggregate			
	Throughput			
	B. Passive			
	Components ,			
	S. No19			
130.	General	Additional Point	Query-1	Consortium is not permissible
			·	for this tender.
			There is no clause for information of	
			consortium for applying in the bidding. We	
			would request you to kindly consider an	
			incorporate.	
131.	General	Additional Point	Query-1	It is a rate contract and the order
			Please Provide the list of Universities	will be placed as & when
				ERNET will receive such
				orders
132.	General	Additional Point	Query-1	RFP is self-explanatory
			Please Provide the details of existing	- ,
			equipments.	
133.	General	Additional Point	Query-1	RFP is self-explanatory
			Please clarify on FMS requirement.	

All other terms & conditions of the tender will remain unchanged otherwise specified in above reply