

Corrigendum to Request for Proposal (RFP) for Supply, Installation, Configuration and Maintenance of Five numbers of Payment Hardware Security Modules (HSM) devices for ATM Switch at DC, Mumbai & DR Site, Bengaluru

Last Date of Bid Submission is Extended upto to 25.07.2022

Sl. No	Clause No	Page No	Clause	Query	Bank Response
1	Broad Scope of Work Point No 8.5.5	13	If deployed payment HSM becomes faulty/ malfunctions, it would be the responsibility of the selected bidder to get it repaired or replaced at the earliest (Max. within 48 hours preferably within 24 hours).	Considering in case the HSM becomes faulty, the replacement happens through RMA proces request by the OEM and replcement happens within 3-4 weeks as a standard procedure. However, in case of any issue is observed on the HSM, we assure the Bank to address the issue within 24 Hrs and with Max. 48 Hours. Therefore, we request the bank to change the clause "If deployed payment HSM becomes faulty/ malfunctions, it would be the responsibility of the selected bidder to address the issue within 24 Hours Max 48 Hrs and resolve the issue at the earliest.	Please be guided by RFP
2	Broad Scope of Work Point No 8.5.5	13	Spares for the hardware/software offered should be available for at least 7 years from the date of project sign off at Bank's premises.	We request the Bank to change the clause to availability of spare for five years considering the contact of the project period	Please be guided by RFP
3	Broad Scope of Work Point No 8.5.8	14	The payment HSM device should not be out of life for 7 years.	We request the Bank to change the clause as below considering the contact of the project period: (The payment HSM device should not be out of life for 5 years)	Please be guided by RFP
4	8.5.9	14	The cost of modifications or customization in the software will be borne by the bidder. If the bidder changes the model of the payment HSM device during the period of the contract, bidder has to re submit the necessary certificate for the new model and undertake the necessary modifications in the software without any additional cost, within a reasonable time mutually agreed between the bank and the bidder without affecting the services.	The cost of any customization in near future, if arising due to new additional security compliance will be charged extra	Implementation of all the mandates/services as per the guidelines received from Regulator/s (RBI,NPCI,DFS,TRAI,IRDA,MasterCard,VISA etc) and/or Associations (ex. IBA) and/or Industry standards change (ex PCI, PTS, FIPS etc) will be the responsibility of the bidder without any additional cost to the Bank. The vendor should undertake to make any changes as per the regulatory requirements.

Sl. No	Clause No	Page No	Clause	Query	Bank Response
5	8.5.13	14	It is the responsibility of the Bidder to change/upgrade/customize its infrastructure/solution for ensuring the compliance to statutory, regulatory guidelines from RBI, TRAI, IRDA, NPCI, IBA, MASTER CARD and VISA etc. at no extra cost to the Bank	It is not possible to predict what future guidelines will be and estimated cost to implement the same in a product. So request bank to consider this point again and modify this to : "11. It is the responsibility of the Bidder to change/upgrade/customize its infrastructure/solution for ensuring the compliance to statutory, regulatory guidelines from RBI, TRAI, IRDA, IBA, MASTER CARD and VISA etc. as per the estimated cost required to bank for those changes."	Please refer Banks response of Sl.No. 4 of this corrigendum
6	8.5.30	16	The bidder should be an authorized service provider for reputed manufacturers and must have requisite expertise in providing maintenance of HSMS and LOA to be provided from the OEM.	we request bank to allow us to participate in this RFP with the authorized partner/SI of OEM. MAF will be in the name of authorised partner of OEM. We would like to bid this tender in consortium. We request Bank to consider our request.	Please be guided by RFP
7	9. Terms of Execution of Work	17	The Bidder should deliver 5 payment HSMS within 6 weeks from the date of the Purchase order.	We request the Bank to change the delivery timeline to 10-12 weeks consdiering current situation and delivery impacetd globally for the HSMS	Please read the clause as: The Bidder should deliver 5 payment HSMS within 8 weeks from the date of the Purchase order. In case of delay in delivery of equipment, penalty will be charged as mentioned in Liquidated Damages clause.
8	9. Terms of Execution of Work	17	The Bidder should deliver 5 payment HSMS within 6 weeks from the date of the Purchase order. In case of delay in delivery of equipment, penalty will be charged as mentioned in Liquidated Damages clause. The Bidder shall complete the installation and	Request to change The Bidder should deliver 5 payment HSMS within 10-12 weeks from the date of the Purchase order. In case of delay in delivery of equipment, penalty will be charged as mentioned in Liquidated Damages clause	Please refer Banks response of Sl.No. 7 of this corrigendum
9	9	17	The Bidder should deliver 5 payment HSMS within 6 weeks from the date of the Purchase order. In case of delay in delivery of equipment, penalty will be charged as mentioned in Liquidated Damages clause.	Currently, due to component shortage issue, the Delivery Period is within 30 weeks	Please refer Banks response of Sl.No. 7 of this corrigendum

Sl. No	Clause No	Page No	Clause	Query	Bank Response
10	9. Terms of Execution of Work	17	The Bidder should deliver 5 payment HSMS within 6 weeks from the date of the Purchase order. In case of delay in delivery of equipment, penalty will be charged as mentioned in Liquidated Damages clause.	In view of the global shortage of chips which has resulted in the built-up stress in the supply chain of all IT equipment and other COVID-19 related restrictions we would request Union Bank of India to kindly amend the delivery timeline as suggested below: The Bidder should deliver 5 payment HSMS within 25 weeks from the date of the Purchase order. In case of delay in delivery of equipment, penalty will be charged as mentioned in Liquidated Damages clause.	Please refer Banks response of Sl.No. 7 of this corrigendum
11	10	17	Locations to be Covered - If Union Bank of India shifts any of the sites to a new location, the successful bidder shall continue to provide respective services from the new location including decommissioning of the required equipment from the current location and commission the items at new location without any additional cost to the bank within the contract period. In addition, if Union Bank of India opens a new office at any location, the successful bidder shall provide respective services including commissioning of the equipment to the new location without any additional cost to the bank within the contract period.	We request bank to reconsider this clause. If bank shifts any of its sites for any reason, the charges for services, decommissioning of the required equipment and commissioning to new site to be borne by the Bank at actuals.	Please be guided by RFP
12	12.3	18	The prices discovered shall be frozen for one year and Bank may, at its discretion may place repeat orders in case of requirement of additional devices	The validity of the prices can be frozen for a period of 90 days unless notified by OEM	Please be guided by RFP
13	12.4	18	Right to Alter Quantities and Price freezing- The prices finalized in this RFP process shall remain valid for the contract period of 5 years from the date of sign off for respective payment HSMS with 3 years of warranty. AMC/ATS prices of Hardware and system software will remain valid for 2 years post warranty	As you are aware these products are imported and the prices are linked to various factors i.e. Dollar fluctuation rates, taxes and duties. Hence we request bank to reconsider this clause.	Please be guided by RFP

Sl. No	Clause No	Page No	Clause	Query	Bank Response
14	26.3	27	The price payable to the Bidder shall be inclusive of carrying out any modifications changes / upgrades to the application and other software that is required to be made in order to comply with any statutory or regulatory requirements or any industry-wide changes arising during the subsistence of the contract/ agreement, and the Bank shall not pay any additional cost for the same. The Bidder needs to provide with the details about all such items considered in the RFP	It is not possible to predict what future guidelines will be and estimated cost to implement the same in a product. So request bank to consider this point again	Implementation of all the mandates/services as per the guidelines received from Regulator/s (RBI,NPCI,DFS,TRAI,IRDA,MasterCard,VISA etc) and/or Associations (ex. IBA) and/or Industry standards change (ex PCI, PTS, FIPS etc) will be the responsibility of the bidder without any additional cost to the Bank. The vendor should undertake to make any changes as per the regulatory requirements.
15	41. Payment Terms	36	On delivery of Hardware with System Software at Both DC and DR sites: 40% On completion of installation, configuration and commissioning of Payment HSM Modules at Both DC and DR: 50% On Project sign off and against Performance Bank Guarantee (PBG) as per Annexure X and SLA (Service Level Agreement signed by both parties: 10%	We request the Bank to change the payment clause as below and consider for the amendment: On delivery of Hardware with System Software at Both DC and DR sites: 70% On completion of installation, configuration and commissioning of Payment HSM Modules at Both DC and DR: 20% On Project sign off and against Performance Bank Guarantee (PBG) as per Annexure X and SLA (Service Level Agreement signed by both parties: 10%	Please be guided by RFP
16	41.4	36	Payment Terms: 40% On On delivery of Hardware with System Software at Both DC and DR sites. 50% On completion of installation, configuration and commissioning of Payment HSM Modules at Both DC and DR 10% On Project sign off and against Performance Bank Guarantee (PBG) as per Annexure X and SLA (Service Level Agreement signed by both parties.	Request to modify the payment terms to below: 90% against delivery of HSM 10% against installation of HSM	Please be guided by RFP
17	41.5	36	AMC for hardware will be paid on quarterly basis in arrears against submission of physical invoice.	Request to modify the payment terms to below: Half yearly advance	Please be guided by RFP

Sl. No	Clause No	Page No	Clause	Query	Bank Response
18	41. Payment Terms	36	<ul style="list-style-type: none"> •On delivery of Hardware with System Software at Both DC and DR sites. - 40% •On completion of installation, configuration and commissioning of Payment HSM Modules at Both DC and DR sites. - 50% •On Project sign off and against Performance Bank Guarantee (PBG) as per Annexure X and SLA (Service Level Agreement signed by both parties. - 10% 	<p>We would request the Bank to kindly amend the Payment Terms as suggested below to align with the industry standards and also to support the economy in the post COVID-19 era where in all companies are struggling to re-cover:</p> <ul style="list-style-type: none"> •On delivery of Hardware with System Software at Both DC and DR sites. - 80% •On completion of installation, configuration and commissioning of Payment HSM Modules at Both DC and DR sites. - 10% •On Project sign off and against Performance Bank Guarantee (PBG) as per Annexure X and SLA (Service Level Agreement signed by both parties. - 10% 	Please be guided by RFP
19	6.8 Availability of Spares	51	Spares for the hardware/software offered should be available for at least 7 years from the date of project sign off at Bank's premises.	We request the Bank to change the clause to availability of spare for five years considering the contact of the project period	Please be guided by RFP
20	68	51	Spares for the hardware/software offered should be available for at least 7 years from the date of project sign off at Bank's premises.	There are no spares available for HSM. However we can supply standby HSM on request at additional cost.	Please be guided by RFP
21	73. Annexure C - Eligibility Criteria	55	2. The bidder should be a company registered in India as per Company Act 1956 /2013 or a partnership firm / a Limited Liability Partnership company under the Limited Liability Partnership Act 2008 in India and should be in existence for last 3 years from the date of issuance of RFP.	<p>During the FY 2020-21, We had an internal organizational re-structuring and the "Digital Services" Business Unit has been transferred to another company which is a wholly owned subsidiary of parent company.</p> <p>In view of the above we would request Union Bank of India to kindly consider the documentary evidence of the parent company, in case the Bidder is a wholly owned subsidiary, for eligibility criteria compliance.</p>	<p>Please read the clause as "The bidder/bidder's parent company should be a company registered in India as per Company Act 1956 /2013 or a partnership firm / a Limited Liability Partnership company under the Limited Liability Partnership Act 2008 in India and should be in existence for last 3 years from the date of issuance of RFP. However, bidder's parent company must be in Payment HSM business and it should be wholly owned subsidiary of the parent company".</p> <p>(Certificate of incorporation/certificate for commencement of business/other relevant documentary proof is to be submitted)</p>

Sl. No	Clause No	Page No	Clause	Query	Bank Response
22	73. Annexure C - Eligibility Criteria	55	3. The bidder should have minimum annual turnover of Rs.25.00 Crore in each of the last three financial years i.e., 2018-19, 2019-20 and 2020-21 as per the audited balance sheet available at the time of submission of tender. This must be the individual company turnover and not that of any group of companies.	<p>During the FY 2020-21, We had an internal organizational re-structuring and the "Digital Services" Business Unit has been transferred to another company which is a wholly owned subsidiary of parent company.</p> <p>In view of the above we would request Union Bank of India to kindly consider the audited financials of the parent company, in case the Bidder is a wholly owned subsidiary, for eligibility criteria compliance.</p>	<p>Please read the clause as "The Bidder/Bidder's parent company should have minimum average annual turnover of Rs.25 Crore in the last three financial years i.e.2018-19, 2019-20 and 2020-21 as per the audited balance sheet available at the time of submission of tender. This must be the individual company turnover and not that of any group of companies. The bidder may submit the balance sheet of bidder's parent company. However, Bidder's parent company must be in Payment HSM business and it should be wholly owned subsidiary of the parent company.</p> <p>Note: Bank Shall Follow Govt Guidelines/Notifications for Public Procurement. As per Policy Circular No.1(2)(1)/2016-MA dated 10.03.2016 issued by GOI and F.20/2/2014-PPD (Pt) dated 20.09.2016, bank may relax condition of prior turnover and prior experience with respect to Micro and Small Enterprises and Startups subject to meeting of quality and technical specifications.</p> <p>(Copies of the audited balance sheet and Profit & Loss Statement of the company showing the same is to be submitted)</p>
23	73. Annexure C - Eligibility Criteria	55	4. Bidder should have positive operating Profit (as EBITDA i.e., Earnings Before Interest, Tax, Depreciation & Amortization) in the last three financial years i.e., 2018-19, 2019-20 and 2020-21 as per the audited balance sheet available at the time of submission of tender.	<p>During the FY 2020-21, We had an internal organizational re-structuring and the "Digital Services" Business Unit has been transferred to another company which is a wholly owned subsidiary of parent company.</p> <p>In view of the above we would request Union Bank of India to kindly consider the audited financials of the parent company, in case the Bidder is a wholly owned subsidiary, for eligibility criteria compliance.</p>	<p>Please read the clause as " Bidder/Bidder's parent company should have positive operating Profit (as EBITDA i.e. Earnings Before Interest, Tax, Depreciation & Amortization) in the last three financial years i.e. 2018-19, 2019-20 and 2020-21 as per the audited balance sheet available at the time of submission of tender. The bidder may submit the balance sheet of bidder's parent company. However, Bidder's parent company must be in Payment HSM business and it should be wholly owned subsidiary of the parent company.</p> <p>(Copies of the audited balance sheet and Profit/Loss statement of the company is to be submitted)</p>

Sl. No	Clause No	Page No	Clause	Query	Bank Response
24	73. Annexure C- Eligibility Criteria Point no 6	56	The Bidder/OEM should have supplied, installation and maintenance with atleast 2 customers having Base24 Switch in last 3 years in India in BFSI Sector/ Govt. Enterprise from the date of issuance of RFP	<p>We request the Bank to relax the clause " Bidder should have experience in supply of HSM at least to two Govt. organizations/PSU/Scheduled Commercial Banks in India in the last three years</p> <p>Towards the HSM compatibility / seamless integration with Base24 Switch, we shall provide a declaration letter confirming the same for the proposed HSM</p>	Please be guided by RFP
25	73. Annexure C - Eligibility Criteria	56	5. The Bidder/OEM should have supplied, installation and maintenance with atleast 2 customers having Base24 Switch in last 3 years in India in BFSI Sector/ Govt. Enterprise from the date of issuance of RFP	<p>During the FY 2020-21, We had an internal organizational re-structuring and the "Digital Services" Business Unit has been transferred to another company which is a wholly owned subsidiary of parent Company.</p> <p>In view of the above we would request Union Bank of India to kindly consider the project experience of the parent company, in case the Bidder is a wholly owned subsidiary, for eligibility criteria compliance.</p>	<p>Please read the clause as" The bidder/bidder's Parent company/OEM should have supplied, installation and maintenance with atleast 2 customers having Base24 Switch in last 3 years in India in BFSI Sector/ Govt. Enterprise from the date of issuance of RFP.</p> <p>(The bidder has to submit Purchase Order/ Engagement letter/ Work Order/Service agreement and Satisfactory letter.)</p>
26	73	56	Annexure C - Eligibility Criteria The Bidder/OEM should have supplied, installation and maintenance with atleast 2 customers having Base24 Switch in last 3 years in India in BFSI Sector/ Govt. Enterprise from the date of issuance of RFP	<p>We request bank to amend the criteria as -</p> <p>"The Bidder/OEM should have supplied, installation and maintenance with atleast 2 customers having card processing platform on HPE Nonstop Systems such as BASE24 or Connex in last 3 years globally in BFSI Sector/ Govt. Enterprise from the date of issuance of RFP."</p> <p>Trust bank would consider our request favourably</p>	Please be guided by RFP

Sl. No	Clause No	Page No	Clause	Query	Bank Response
27	73	56	<p>6) Bidder should be either an Original Equipment Manufacturer (OEM) of devices/software solutions or authorized partner/SI of OEM.</p> <p>In case the bidder is an Authorized partner of the OEM, Bidder needs to provide Manufacturer Authorization Form (MAF) from OEM stating that bidder is authorized partner of OEM and authorized to participate in this tender and in case the bidder is not able to perform obligations as per contract during the contract period, contracted services will be provided by OEM or its authorized partner.</p> <p>OEM can quote directly or through authorized partners. However, both i.e. OEM & their authorized partner cannot participate in the RFP.</p> <p>In case, both (OEM & their authorized partner) participate, the bid of the OEM only will be considered.</p>	<p>we request bank to allow us to participate in this RFP with the authorized partner/SI of OEM. MAF will be in the name of authorised partner of the OEM. We would like to bid this tender in consortium.</p> <p>We request Bank to consider our request.</p>	Please be guided by RFP
28	3	58	<p>Speed:1000 TPS/CPS (Transactions per second/Calls per second)</p> <p>Speed: 60 TPS/CPS (Transactions per second/Calls per second)</p>	We support right from 80TPS, 280 TPS, 1040 TPS, then increment of 500 right upto 10000 TPS	<p>Please read the clause as:</p> <p>Speed:Minimum 1000 TPS/CPS (Transactions per second/Calls per second)</p> <p>Speed: Minimum 60 TPS/CPS (Transactions per second/Calls per second)</p> <p>Bidders can provide HSM with higher TPS/CPS</p>
29	74. Annexure D - Technical Specification for Payment HSM Point no 8	58	Capable of translating up to at least 1000 PIN triple DES/AES Pin block Per Second.	Capable of translating up to 1000 PIN triple DES/AES PIN block per second from the 1000 TPS model.	<p>Please read the clause as:</p> <p>Capable of translating up to 1000 PIN triple DES/AES PIN block per second from the 1000 TPS model.</p>

Sl. No	Clause No	Page No	Clause	Query	Bank Response
30	74. Annexure D - Technical Specification for Payment HSM Point no 13	58	Should have GUI/CLI available with 2 factor Authentication using USB Tokens	2nd factor of authentication can be provided in many form factors. So request you to consider both USB or smart cards for 2 factor authentication.	Please read the clause as: Should have GUI/CLI available with 2 factor Authentication using USB Tokens or smart cards.
31	13	58	Should have GUI/CLI available with 2 factor Authentication using USB Tokens	2nd factor of authentication can be provided in many form factors. So request you to consider both USB or smart cards for 2 factor authentication.	Please refer Banks response of Sl.No. 30 of this corrigendum
32	3	58		We support right from 80TPS, 280 TPS, 1040 TPS, then increment of 500 right upto 10000 TPS	Please read the clause as: Speed:Minimum 1000 TPS/CPS (Transactions per second/Calls per second) Speed: Minimum 60 TPS/CPS (Transactions per second/Calls per second) Bidders can provide HSM with higher TPS/CPS
33	3	58	Speed:1000 TPS/CPS (Transactions per second/Calls per second) Speed: 60 TPS/CPS (Transactions per second/Calls per second)	Please change the clause, it should support (Transactions per second/Calls per second) right from 80TPS, 280 TPS, 1040 TPS, then further increment of 500 right upto 10000 TPS	Please refer Banks response of Sl.No. 32 of this corrigendum
34	8	58	Capable of translating up to at least 1000 PIN triple DES/AES Pin block Per Second	We would request the Bank for the following change in the specification: Capable of translating up to 1000 PIN triple DES/AES PIN block per second from the 1000 TPS model	Please read the clause as: Capable of translating up to 1000 PIN triple DES/AES PIN block per second from the 1000 TPS model.
35	13	58	Should have GUI/CLI available with 2 factor Authentication using USB Tokens	We would request the Bank for the following change in the specification: Should have GUI/CLI available with 2 factor authentication using USB Tokens or Smart Cards	Please read the clause as: Should have GUI/CLI available with 2 factor Authentication using USB Tokens or smart cards.

Sl. No	Clause No	Page No	Clause	Query	Bank Response
36	74. Annexure D - Technical Specification for Payment HSM Point no 19	59	Cryptographic module certified to FIPS: 140-2 Level 3, 46, 81, 180-4, 186-4, 198 or higher.	<p>Proposed Change -></p> <p>Cryptographic module certified to FIPS: 140-2 Level 3, 186-3, 198</p> <p>Justification FIPS 46-3 and FIPS 81 standard refers to DES has been officially withdrawn and replaced with 3DES and AES</p>	<p>The Payment HSMs is a standard product which follows PCI, FIPS and other industry standards.</p> <p>Please read the clause as: Cryptographic module certified to FIPS: 140-2 Level 3 or higher, 180-4 or higher, 186-3 or higher, 198 or higher supported standard versions and certified with PCI HSM V3.0 or higher .</p>
37	74. Annexure D - Technical Specification for Payment HSM Point no 28	59	Audit trails and 2 Factor Authentication for Auditor using USB tokens	2nd factor of authentication can be provided in many form factor. So request you to consider both USB or smart cards for 2 factor authentication	Please read the clause as: Audit trails and 2 Factor Authentication for Auditor using USB tokens or smart cards.
38	28	59	Audit trails and 2 Factor Authentication for Auditor using USB tokens	<p>We would request the Bank for the following change in the specification:</p> <p>Audit trails and 2 Factor Authentication for Auditor using USB Tokens or Smart Cards</p>	Please refer Banks response of Sl.No. 37 of this corrigendum
39	41	60	Multiple LMK options - at least 20 partitions per HSM	Kindly request for clarity on requirement for least 20 partitions per HSM, Humble request for revising the count to 10 partitions per HSM with each partition having full control with its own master key and configuration.	Please read the clause as : Multiple LMK options - at least 10 partitions per HSM upto 20 partitions per HSM.
40	46	60	APACS 40 & 70	Seek clarifications on need for Australian standard, Kindly Request you for removing or making this clause as Non-Mandatory	Please be guided by RFP
41	55	60	Minimum Dual port (10 Gbps) supporting TCP/IP & UDP protocols and 10 G Fibre port should be available.	Kindly request for revising this to Network speed supported as 1GBPS	Please read the clause as: Minimum Dual port (1 Gbps) supporting TCP/IP & UDP protocols and 10G Fibre port should be available transceivers (optical) along with the 10G ethernet hardware.

Sl. No	Clause No	Page No	Clause	Query	Bank Response
42	57	60	Symmetric algorithms: AES, ARIA, CAST, HMAC, SEED, Triple DES, DUKPT, BIP32	Kindly request you to remove BIP32, SEED, Airya and KCDSA Algorithms	Please read the clause as: Symmetric algorithms: AES (key lengths upto 256 bit or higher) , DES and Triple DES (key lengths upto 168 bit or higher) DUKPT,HMAC, MD5, SHA1, SH2, SHA3
43	74. Annexure D - Technical Specification for Payment HSM Point no 41	60	Multiple LMK options - at least 20 partitions per HSM	Do you need license for 20 LMK partitons from day 1 or just a support of it from future prespective? Please note that HSM by default comes with 1 LMK license and adding license for 20 LMKs will be an unnecessary cost to the bank if there is no real use case of it.	Please read the clause as : Multiple LMK options - at least 10 partitions per HSM upto 20 partitions per HSM.
44	74. Annexure D - Technical Specification for Payment HSM Point no 47	60	Must have strong separation of administration and operator roles	This is part of general purpose HSM requirement. Request you to remove it	Please read the clause as : Please be guided by RFP terms. Audit trials with User acces controls (ACL) should be available
45	74. Annexure D - Technical Specification for Payment HSM Point no 52	60	Must support clustering and load balancing	Payment HSMs rely on external load balancer and Application provider to provide this functionality. So request you to modify this point to "Must support Active-Active deployment to achieve clustering and load balancing using third party load balancer or from application"	Please read the clause as: "Must support Active-Active deployment to achieve clustering and load balancing using third party load balancer or from application."
46	74. Annexure D - Technical Specification for Payment HSM Point no 54	60	Must support M of N multi-factor authentication	This is part of general purpose HSM requirement. Request you to remove it.	Please be guided by RFP

Sl. No	Clause No	Page No	Clause	Query	Bank Response
47	74. Annexure D - Technical Specification for Payment HSM Point no 55	60	Minimum Dual port (10 Gbps) supporting TCP/IP & UDP protocols and 10 G Fibre port should be available.	<p>1. Do we need Fiber connection support with the HSM? (Fiber connection support is needed only when the HSM needs to be connected to a IBM Mainframe host computer)</p> <p>2. Do we require the transceivers (copper or optical) along with the 10G ethernet hardware platform?</p> <p>Please mention if 1G HSM can suffice the requirement?</p>	Please read the clause as: "Minimum Dual port (1 Gbps) supporting TCP/IP & UDP protocols and 10G Fibre port should be available transceivers (optical) along with the 10G ethernet hardware."
48	74. Annexure D - Technical Specification for Payment HSM Point no 56	60	Asymmetric public key algorithms: RSA, Diffie Hellman, DSA, KCDSA, ECDSA, ECDH, ECOES.	These are the specs of the General purpose HSM and not relevant(DiffieHellman, DSA,KCDSA,ECOES.) in payment standards. Request you to modify this point to "Asymmetric public key algorithms: RSA, ECDSA and ECDH"	Please read the clause as: Asymmetric public key algorithms: RSA (upto 4096 bit or higher), ECDSA and ECDH
49	74. Annexure D - Technical Specification for Payment HSM Point no 57	60	Symmetric algorithms: AES,ARIA,CAST,HMAC,SEED, Triple DES,DUKPT,BIP32	These are the specs of the General purpose HSM and not relevant(ARIA,CAST, SEED and BIP32) in payment standards.Request you to modify this point to "Symmetric algorithms: AES,HMAC, Triple DES,DUKPT"	Please read the clause as: Symmetric algorithms: AES (key lengths upto 256 bit or higher) , DES and Triple DES (key lengths upto 168 bit or higher) DUKPT,HMAC, MD5, SHA1, SH2, SHA3
50	74. Annexure D - Technical Specification for Payment HSM	60	Syslog diagnostics support	HSM diagnostics are monitored using SNMP protocol. So request you to add support for SNMP as well and modify the clause to "Syslog or SNMP diagnostics support"	Please read the clause as: "Syslog or SNMP diagnostics support."
51	41	60	Multiple LMK options - at least 20 partitions per HSM	NOTE: HSM by default comes with 1 LMK license and adding license for 20 LMKs will be an unnecessary cost to the bank if there is no real use case of it. Please confirm if you need license for 20 LMK ?	Please read the clause as: Multiple LMK options - at least 10 partitions per HSM upto 20 partitions per HSM.

Sl. No	Clause No	Page No	Clause	Query	Bank Response
52	49	60	Must have strong separation of administration and operator roles	This is part of general purpose HSM requirement. Request you to remove it.	Please read the clause as: Please be guided by RFP terms. Audit trials with User acces controls (ACL) should be available
53	52	60	Must support clustering and load balancing	Payment HSMs rely on external load balancer and Application providers to provide this functionality. So request you to modify this point to "Must support Active-Active deployment to achieve clustering and load balancing using third party load balancer or from application"	Please read the clause as: Must support Active-Active deployment to achieve clustering and load balancing using third party load balancer or from application.
54	54	60	Must support M of N multi-factor authentication	This is part of general purpose HSM requirement. Request you to remove it.	Please be guided by RFP
55	55	60	Minimum Dual Gigabit Ethernet ports (to service two network segments) and 10 G Fibre port should be available	Yes, 10G device has an additional cost. Please mention if 1G HSM can suffice the requirement?	Please read the clause as: Minimum Dual port (1 Gbps) supporting TCP/IP & UDP protocols and 10G Fibre port should be available transceivers (optical) along with the 10G ethernet hardware.
56	56	60	Asymmetric public key algorithms: RSA, Diffie Hellman, DSA, KCDSA, ECDSA, ECDH, ECOES	These are the specs of the General purpose HSM and not relevant(DiffieHellman, DSA,KCDSA,ECOES.) in payment standards. Request you to modify this point to "Asymmetric public key algorithms: RSA, ECDSA and ECDH"	Please read the clause as: Asymmetric public key algorithms: RSA (upto 4096 bit or higher), ECDSA and ECDH
57	57	60	Symmetric algorithms: AES, ARIA, CAST, HMAC, SEED, Triple DES, DUKPT, BIP32	These are the specs of the General purpose HSM and not relevant(ARIA,CAST, SEED and BIP32) in payment standards.Request you to modify this point to "Symmetric algorithms: AES,HMAC, Triple DES,DUKPT"	Please read the clause as: Symmetric algorithms: AES (key lengths upto 256 bit or higher) , DES and Triple DES (key lengths upto 168 bit or higher) DUKPT,HMAC, MD5, SHA1, SH2, SHA3
58	60	60	Syslog diagnostics support	HSM diagnostics are monitored using SNMP protocol. So request you to add support for SNMP as well and modify the clause to "Syslog or SNMP diagnostics support"	Please read the clause as: Syslog or SNMP diagnostics support.

Sl. No	Clause No	Page No	Clause	Query	Bank Response
59	41	60		We support 10 partitions with each partition having full control with its own master key and configuration.	Please read the clause as: "Multiple LMK options - at least 10 partitions per HSM upto 20 partitions per HSM ."
60	46	60	APACS 40 & 70	What is the need for Australian standard	Please be guided by RFP
61	55	60		Network speed supported is only 1GBPS	Please read the clause as: Minimum Dual port (1 Gbps) supporting TCP/IP & UDP protocols and 10G Fibre port should be available transceivers (optical) along with the 10G ethernet hardware.
62	57	60	Symmetric algorithms: AES, ARIA, CAST, HMAC, SEED, Tr	We do not support the BIP32, SEED, Airya and KCDSA Algorithms	Please read the clause as: Symmetric algorithms: AES (key lengths upto 256 bit or higher) , DES and Triple DES (key lengths upto 168 bit or higher) DUKPT,HMAC, MD5, SHA1, SH2, SHA3
63	41	60	Multiple LMK options - at least 20 partitions per HSM	We would request the Bank for the following change in the specification: Multiple LMK options - up to 20 partitions per HSM	Please read the clause as : Multiple LMK options - at least 10 partitions per HSM upto 20 partitions per HSM.
64	47	60	Must support cryptographic offloading and acceleration	We would request the Bank for the removal of this specification. Justification - This requirement is supported by GP HSM (like Luna) and not a payment HSM	This clause stands deleted.
65	55	60	Minimum Dual port (10 Gbps) supporting TCP/IP & UDP protocols and 10 G Fibre port should be available	1. Please confirm if we need Fiber connection support with the HSM? (Note: Fiber connection support is needed only when the HSM needs to be connected to a IBM Mainframe host computer) 2. Please confirm if we require the transceivers (copper or optical) along with the 10G ethernet hardware platform?	Please read the clause as: Minimum Dual port (1 Gbps) supporting TCP/IP & UDP protocols and 10G Fibre port should be available transceivers (optical) along with the 10G ethernet hardware.

Sl. No	Clause No	Page No	Clause	Query	Bank Response
66	56	60	Asymmetric public key algorithms: RSA, Diffie Hellman, DSA, KCDSA, ECDSA, ECDH, ECOES	We would request the Bank for the following change in the specification: Asymmetric public key algorithms : RSA, ECC (as defined in FIPS 186-3 (P-256, P-384 & P-521)). Justification :	Please read the clause as: Asymmetric public key algorithms: RSA (upto 4096 bit or higher), ECDSA and ECDH
67	57	60	Symmetric algorithms: AES, ARIA, CAST, HMAC, SEED, Triple DES, DUKPT, BIP32	We would request the Bank for the following change in the specification: Symmetric algorithms: AES, HMAC, Triple DES, DUKPT Justification : The other symmetric algorithms mentioned (like CAST, ARIA etc.) are supported by a GP HSM (like Luna) and not by a payment HSM.	Please read the clause as: Symmetric algorithms: AES (key lengths upto 256 bit or higher) , DES and Triple DES (key lengths upto 168 bit or higher) DUKPT,SEED,HMAC, MD5, SHA1, SHA2, SHA3
68	60	60	Syslog diagnostics support	We would request the Bank for the removal of this vendor specific specification.	Please read the clause as: "Syslog or SNMP diagnostics support."
69	41	60	Multiple LMK options - at least 20 partitions per HSM	Kindly request for clarity on requirement for least 20 partitions per HSM, Humble request for revising the count to 10 partitions per HSM with each partition having full control with its own master	Please read the clause as : "Multiple LMK options - at least 10 partitions per HSM upto 20 partitions per HSM ."
70	46	60	APACS 40 & 70	Seek clarifications on need for Australian standard, Kindly Request you for removing or making this clause as Non-Mandatory	Please be guided by RFP
71	55	60	Minimum Dual port (10 Gbps) supporting TCP/IP & UDP protocols and 10 G Fibre port should be available.	Kindly request for revising this to Network speed supported as 1GBPS	Please read the clause as: Minimum Dual port (1 Gbps) supporting TCP/IP & UDP protocols and 10G Fibre port should be available transceivers (optical) along with the 10G ethernet hardware.
72	57	60	Symmetric algorithms: AES, ARIA, CAST, HMAC, SEED, Triple DES, DUKPT, BIP32	Kindly request you to remove BIP32, SEED, Airya and KCDSA Algorithms	Please read the clause as: Asymmetric public key algorithms: RSA (upto 4096 bit or higher), ECDSA and ECDH

Sl. No	Clause No	Page No	Clause	Query	Bank Response
73	65	61	There should not be any changes required in the application/hardware device currently integrated with existing payment HSMs like ATM Switch/Mobile Banking/UPI or Credit Card Switch.	Kindly request you for revision as - changes required are allowed in Applications/hardware device currently integrated with existing payment HSMs like ATM Switch/Mobile Banking/UPI or Credit Card Switch.	The integration of payment HSMs should be seamless without any change in the existing end applications like ATM Switch/Mobile Banking/UPI or Credit Card Switch
74	74. Annexure D - Technical Specification for Payment HSM Point no 74	61	Should adhere to all major industry standards, including FIPS-140-2 level 3, PCI-DSS, Qualified Signature or Seal Creation Device (QSCD) listing for eIDAS, Common Criteria EAL4+(AVA_VAN.5 and ALC-FLR.2) against the protection profile EN 419 221-5 etc.	Qualified Signature or Seal Creation Device (QSCD) listing for eIDAS, Common Criteria EAL4+(AVA_VAN.5 and ALC-FLR.2) against the protection profile EN 419 221-5 etc. This certification is for EUROPEAN countries only and has no relevance in payment ecosystem. Request you to modify this point to "Should adhere to all major industry standards, including FIPS-140-2 level 3, PCI 3.0 certified, PCI-DSS, AusPayNet approved"	Please read the clause as: "Should adhere to all major industry standards, including FIPS-140-2 level 3 or higher, PCI 3.0 or higher version certified, PCI-DSS, PCI-HSM, PCI-PTS, AusPayNet approved. etc.
75	74. Annexure D - Technical Specification for Payment HSM	61	The solution must have added ability of being spread across multiple locations and managed as a group, synchronizing and load balancing all the units to maintain network functionality even if an entire data center were to lose connectivity.	Load balancing is done by the application or third party Load balancer. Request you to modify this clause to : "The solution must have added ability of being	Please read the clause as: "Must support Active-Active deployment to achieve clustering and load balancing using third party load balancer or from application."
76	74	61	Should adhere to all major industry standards, including FIPS-140-2 level 3, PCI-DSS, Qualified Signature or Seal Creation Device (QSCD) listing for eIDAS, Common Criteria EAL4+(AVA_VAN.5 and ALC-FLR.2) against the protection profile EN 419 221-5 etc.	Qualified Signature or Seal Creation Device (QSCD) listing for eIDAS, Common Criteria EAL4+(AVA_VAN.5 and ALC-FLR.2) against the protection profile EN 419 221-5 etc. This certification is for EUROPEAN countries only and has no relevance in payment ecosystem. Request you to modify this point to "Should adhere to all major industry standards, including FIPS-140-2 level 3, PCI 3.0 certified, PCI-DSS, AusPayNet approved"	Please read the clause as: "Should adhere to all major industry standards, including FIPS-140-2 level 3 or higher, PCI 3.0 or higher version certified, PCI-DSS, PCI-HSM, PCI-PTS, AusPayNet approved. etc.

Sl. No	Clause No	Page No	Clause	Query	Bank Response
77	76	61	The solution must have added ability of being spread across multiple locations and managed as a group, synchronizing and load balancing all the units to maintain network functionality even if an entire data center were to lose connectivity	Load balancing is done by the application or third party Load balancer. Request you to modify this clause to : "The solution must have added ability of being spread across multiple locations and managed as a group, synchronizing and load balancing all the units to maintain network functionality even if an entire data center were to lose connectivity.HSM support Active-Active deployment to achieve clustering and load balancing using third party load balancer or from application"	Please read the clause as: "Must support Active-Active deployment to achieve clustering and load balancing using third party load balancer or from application."
78	65	61	There should not be any changes required in the application/hardware device currently integrated with existing payment HSMs like ATM Switch/Mobile Banking/UPI or Credit Card Switch.	Kindly request you for revision as - changes required are allowed in Applications/hardware device currently integrated with existing payment HSMs like ATM Switch/Mobile Banking/UPI or Credit Card Switch.	The integration of payment HSMs should be seamless without any change in the existing end applications like ATM Switch/Mobile Banking/UPI or Credit Card Switch.
79	65	61		There will be changes required in Applications	The integration of payment HSMs should be seamless without any change in the existing end applications like ATM Switch/Mobile Banking/UPI or Credit Card Switch
80	74	61	Should adhere to all major industry standards, including FIPS-140-2 level 3, PCI-DSS, Qualified Signature or Seal Creation Device (QSCD) listing for eIDAS, Common Criteria EAL4 + (AVA_VAN.5 and ALC-FLR.2) against the protection profile EN 419 221-5 etc.	We would request the Bank for the removal of this specification because the requirement is specific to GP HSM (like Luna) and not for a payment HSM	Please read the clause as: "Should adhere to all major industry standards, including FIPS-140-2 level 3 or higher, PCI 3.0 or higher version certified, PCI-DSS, PCI-HSM, PCI-PTS, AusPayNet approved. etc.
81	87	62	Annexure D - Technical Specifications- Remote Key Loading & Management Card/Mobile payment support - should support the needs of leading payment brands (RuPay, JCB, VISA, MasterCard, UnionPay, American Express) in number of areas including	FutureX has a unique device specifically for this purpose. How does UBI intend to perform RKL as it is typically done through integration with the Switch?	Please be guided by RFP

Sl. No	Clause No	Page No	Clause	Query	Bank Response
82	91	62	Annexure D - Technical Specifications Remote key loading for ATM and POS devices	We Assume that Bank is expecting RKL feature functionality in HSM for a third party app or switch to use and achieve. Please correct our understanding. What are the make and model of the ATMs/ POS devices and other apps?	Please be guided by RFP. The details shall be shared to the successful bidder.
83	92	62	Annexure D - Technical Specifications Local/Global key Management	How many keys should be supported on a single device? Also, do we need to support EMV Issuance?	Please be guided by RFP