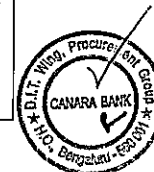केनरा बैंक Canara Bank

Replies to pre bid queries to GeM Bid ref no. GEM/2022/B/2835204 dated 12/12/2022 for Supply, Installation and Maintenance of Network Hardware Security Module (HSM) for Canara Bank for Canara Bank for 5 years:

Sl. No.	GeM bid Clause	Clause/ Technical Specification	Bidder's Query	Bank's Reply
1.	Additional terms and conditions Annexure-1 Scope of work for CTS (Category-I)	5.Compatibility with DEM application of M/s NCR Corporation India Pvt Ltd is mandatory.	Our HSM will expose REST APIs for integration with DEM application of M/s NCR Corporation India Pvt Ltd.(Please allow Startup and make in India HSM provider exemption Pre-existing Integration, it can be integrated in POC stage).	This GeM bid clause is modified as: 5.The Network HSM has to be certified with DEM application vendor M/s NCR Corporation India Pvt Ltd.
2.	Additional terms and conditions Annexure-2 Technical Requirements for CTS (Category-I)	1.HSM Type & Model Thales Luna A750 Network HSM (Hardware Security Model)	We would like to request why Thales HSM type and Model is specified. Please make the specification vendor neutral. Kindly request to make it generic by removing specific OEM name as it creates a monopolistic situation for other OEMs.	This GeM bid clause is modified as: 1.HSM Type & Model: Network HSM (Hardware Security Model)
3.	Additional terms and conditions Annexure-2 Technical Requirements for CTS (Category-I)	11. Cryptographic Transfer Asymmetric public key algorithms: RSA ,ECC, Diffie-Hellman, DSA, ECDSA, ECDH, ECIES Symmetric algorithms: AES, ARIA, CAST, HMAC, SEED, Triple DES, DUKPT, BIP32	Algorithms like ECIES is not used in DEM, ARIA, CAST, DUKPT, BIP32 project, so we request you to remove same. We can add this point, any algorithm which is required by DEM project to be supported in future, should be made available by bidder without any extra cost to Bank.	Bidder to comply with GeM bid terms and conditions.

Sl. No.	GeM bid Clause	Clause/ Technical Specification	Bidder's Query	Bank's Reply
4.	Additional terms and conditions Annexure-2 Technical Requirements for CTS (Category-I)	12.Cryprtographioc ECC Full Suite B implementation with fully licensed ECC, ECDSA, ECDH, ECIES	Algorithms like ECIES is not used in DEM project, so we request you to remove same. We can add this point, any algorithm which is required by DEM project to be supported in future, should be made available by bidder without any extra cost to Bank.	Bidder to comply with GeM bid terms and conditions.
5.	Additional terms and conditions Annexure-1 Scope of work UPI (Category-II)	Category 2: Scope of work 9.The HSM should be FIPS 140-2 level 3 certified modules, such certifications should be under the name of OEM supplying the HSM to the Bank. All Bank keys including Private Keys should be stored and protected within Certified memory HSM device for entire key life cycle.	Why FIPS certificate is required to be in the name of OEM? What extra security we are going achieve by having certificate in OEM's name? As per CCA guidelines Cryptographic Keys need to be stored in Cryptographic Module which is FIPS 140-2 level 3 certified, so when Cryptographic keys are stored in Certified module, why Certificate is required to be in name of Network Appliance OEM?	Bidder to comply with GeM bid terms and conditions.
6.	Additional terms and conditions Annexure 2 Technical Requirements for UPI(Category-II)	8. Security Certifications: The HSM should be FIPS 140-2 level 3 certified modules, such certifications should be under the name of OEM supplying the HSM to the Bank. All Bank keys including Private Keys should be stored and	Why FIPS certificate is required to be in the name of OEM? What extra security we are going achieve by having certificate in OEM's name? As per CCA guidelines Cryptographic Keys need to be stored in Cryptographic Module	Bidder to comply with GeM bid terms and conditions.

Sl. No.	GeM bid Clause	Clause/ Technical Specification	Bidder's Query	Bank's Reply
		protected within Certified memory HSM device for entire key life cycle.	which is FIPS 140-2 level 3 certified, so when Cryptographic keys are stored in Certified module, why Certificate is required to be in name of Network Appliance OEM?	
7.	Additional terms and conditions Annexure-1 Scope of work UPI (Category-II)	12.OEM/Bidder should have supplied, installed, and supported at-least one scheduled commercial bank on handling UPI transactions & projects for atleast last 2 years having handled atleast 50 lakh volume of transactions in a day through HSM.A proof of document should be submitted at the time of bid evaluation.	We would like to request exemption under this clause as we are Make In India OEM & MSME. So requesting you to allow exemption under "OEM/Bidder should have supplied, installed, and supported at-least one scheduled commercial bank on handling UPI transactions & projects for atleast last 2 years having handled atleast 50 lakh volume of transactions in a day through HSM.A proof of document should be submitted at the time of bid evaluation." for Make In India OEM & MSME.	Bidder to comply with GeM bid terms and conditions.
8.	Additional terms and conditions Annexure 2 Technical Requirements for UPI(Category-II)	4.Cryptography RSA(2048), DSA, HASH(SHA 256),ECDSA,AES,TRIPLE-DES BIP32 algo for Wallet encryption should be supported.	Please remove BIP32 as it is Bitcoin algorithm and not required for RFP use case	This GeM clause is modified as: 4.Cryptography RSA(2048), DSA, HASH(SHA 256),ECDSA,AES,TRIPLE-DES

Sl. No.	GeM bid Clause	Clause/ Technical Specification	Bidder's Query	Bank's Reply
				for Wallet encryption should be supported.
9.	Additional terms and conditions 10. Delivery installation and maintenance	10.2. The delivery of all HSMs as per technical specifications and scope of work should be within Seven (7) weeks from the date of acceptance of the Purchase Order. Please note that no extra charges will be paid for those locations where road permit is required. The selected bidder has to arrange for road permit at his own cost. It will be the sole responsibility of the selected bidder to submit any form required for release of shipment from the check post.	Request the Bank to change the delivery time line to within 8 weeks instead seven(7)	The GeM bid clause is modified as under: "10. Delivery, installation and maintenance: 10.2. The delivery of all Network HSMs as per technical specifications and scope of work should be within Twelve (12) weeks from the date of acceptance of the Purchase Order. Please note that no extra charges will be paid for those locations where road permit is required. The selected bidder has to arrange for road permit at his own cost. It will be the sole responsibility of the selected bidder to submit any form required for release of

Sl. No.	GeM bid Clause	Clause/ Technical Specification	Bidder's Query	Bank's Reply
				shipment from the check post.".
10.	Additional terms and conditions Technical requirements for UPI (Category-II)	9.Highest Security & Compliance: Keys always remain in FIPS-validated, tamper-evident hardware	Please note that storing keys inside the HSM "Keys in box" limits storage capacity. Also it requires manual backups and additional backup HSMs to do that which increases the total cost substantially. Moreover, in the case the HSM fails, the entire infrastructure goes for a toss. The recommendation is to store the keys as encrypted application tokens and not keys which gives virtually unlimited capacity. Hence we request to kindly modify it to store within the FIPS 140-2 boundary, rather than inside the HSM.	Bidder to comply with GeM bid terms and conditions.
11.	Additional terms and conditions: Technical requirements for UPI (Category-II)	3.Capabilities & Performance Support up to : 10000 TPS @RSA 2048	Please specify the exact RSA 2048 signing speed requirement so that we can quote the exact model. The mentioned RSA 2048 performance, i.e. 10000 TPS is specific to a particular OEM. Please revise it to 8500 TPS.	The GeM bid clause is modified as: 3.Capabilities & Performance Support up to : 8000 TPS @RSA 2048

Sl. No.	GeM bid Clause	Clause/ Technical Specification	Bidder's Query	Bank's Reply
12.	Additional terms and conditions: Technical requirements for UPI (Category-II)	7.Host Interface • 2 options: 4 Gigabit Ethernet ports with Port Bonding, or 2 x 10G fiber network connectivity and 2 x 1G with Port Bonding	Usually a HSM comes with 2 1 gigabit network interface with port bonding support. 4 network ports is not mandatory. Kindly change it to 2 gigabit Ethernet ports.	This GeM bid clause is modified as : • 2 options: 2 no's of 1 gigabit Ethernet port with port binding support, or 2 x 10G fiber network connectivity and 2 x 1G with Port Bonding
13.	Additional terms and conditions: Technical Requirements for CTS (Category-I)	1.HSM Type & Model Thales Luna A750 Network HSM (Hardware Security Model)	Kindly request to make it generic by removing specific OEM name as it creates a monopolistic situation for other OEMs.	This GeM bid clause is modified as: 1.HSM Type & Model: Network HSM (Hardware Security Model)
14.	Additional terms and conditions: Technical Requirements for CTS (Category-I)	6. Partition Virtual NETWORK HSMs The NETWORK HSM should have partitions with each having its own serial number/name so as to allow , storing different certificates in each partition. Each partition should be protected with password to grant access to the no. of partitions/license.	Please note that the partition serial no. is specific to a particular OEM. There are different methods to create partitioning on the HSM.	Each partitions shall have its own serial number/identifier and each partition should be protected with password to grant access to that particular partition only.

Sl. No.	GeM bid Clause	Clause/ Technical Specification	Bidder's Query	Bank's Reply
				Bidder to comply with GeM bid terms and conditions.
15.	Additional terms and conditions: Technical Requirements for CTS (Category-I)	7. Host Connectivity Host Interface 4x 1 Gigabit Ethernet ports	Usually a HSM comes with 2 x 1 gigabit network interface with port bonding support. 4 network ports is not mandatory.	Bidder to comply with GeM bid terms and conditions.
16.	Additional terms and conditions: Technical Requirements for CTS (Category-I)	10.Secure Transport Mode The NETWORK HSM Should secure transport Mode. i.e Temporary transfer state to ensure security when NETWORK HSM is being moved from one facility to another	Please note that the Secure Transport Mode is specific to a particular OEM. There are different secure methods to achieve the same.	There shall be a logical check so as to determine that the preconfigured keys/security parameters/ configurations, firmware etc. of the device is not tampered during a transport.
17.	Additional terms and conditions: Technical Requirements for CTS (Category-I)	11. Cryptographic Transfer Symmetric algorithms: AES, ARIA, CAST, HMAC, SEED, Triple DES, DUKPT, BIP32.	Please note that the DUKPT and BIP32 algorithms are applicable to Payment HSMs and do not apply to General Purpose HSMs required in this tender.	Bidder to comply with GeM bid terms and conditions.

Sl. No.	GeM bid Clause	Clause/ Technical Specification	Bidder's Query	Bank's Reply
18.	Additional terms and conditions: Technical Requirements for CTS (Category-I)	15. Key Generation & Storage Ability to generate and store at least 500 RSA keys (2048 and 4096) on board on demand and shall be stored inside high security module FIPS 140-2 LEVEL 3 certified memory	Please note that storing keys inside the HSM "Keys in box" limits storage capacity. Also it requires manual backups and additional backup HSMs to do that which increases the total cost substantially. Moreover, in the case the HSM fails, the entire infrastructure goes for a toss.	Bidder to comply with GeM bid terms and conditions.
19.	Additional terms and conditions: Technical Requirements for CTS (Category-I)	19.Key BackupReliability: minimum 170,000 hrs	Please note that the mentioned nos. for reliability is specific to an OEM. Usually we have seen in all tenders that the MTBF is kept as 100,000 hours.	Bidder to comply with GeM bid terms and conditions.
20.	Additional terms and conditions: Technical Requirements for CTS (Category-I)	22. Other requirements Keys to always remain in FIPS-validated, tamper-evident hardware throughout its lifecycle.	Please note that storing keys inside the HSM "Keys in box" limits storage capacity. Also it requires manual backups and additional backup HSMs to do that which increases the total cost substantially. Moreover, in the case the HSM fails, the entire infrastructure goes for a toss.	Bidder to comply with GeM bid terms and conditions.

Sl. No.	GeM bid Clause	Clause/ Technical Specification	Bidder's Query	Bank's Reply
21.	Additional terms and conditions: HSM Scope of work for CTS	3.The Bidder/OEM should provide the Network HSM which supports 5000 Transaction Signing per Second(TPS) @ RSA 2048.	5000 Transaction Signing per Second(TPS) @ RSA 2048 is an overkill as it does 180 lakhs transaction per hours. Also this is Thales OEM specifc HSM model . Request you to change it to 500 TPS per second .	Bidder to comply with GeM bid terms and conditions.
22.	Additional terms and conditions: Scope of Work for UPI (Category-II)	8.The Bidder/OEM should provide the Network HSM which supports 10000 Transaction Signing per Second (TPS) @ RSA 2048 and RSA-SHA256.	10000 Transaction Signing per Second(TPS) @ RSA 2048 is an overkill as it does 360 lakhs transaction per hours. Also this is Thales OEM specific HSM model . Request you to change it to 1000 TPS per second .	The GeM bid clause is modified as under: 8.The Bidder/OEM should provide the Network HSM which supports 8000 Transaction Signing per Second (TPS) @ RSA 2048 and RSA-SHA256.
23.	Additional terms and conditions: Scope of Work for UPI (Category-I)	10.Scope of Work for UPI (Category-II) The Private keys should always remain in FIPS 140-2 Level 3 Certified Memory of HSM & Private Keys should never be available in software or application layer in any form and to take backup it should support FIPS 140-2 level 3 HSM	Each HSM OEM has its own way to store and protect keys as per FIPS 140-2 level 3 . Request you to remove Backup HSM dependency and use FIP complaint backup process Request you to change it to: The Private keys should always remain in FIPS 140-2 Level 3	Bidder to comply with GeM bid terms and conditions.

Sl. No.	GeM bid Clause	Clause/ Technical Specification	Bidder's Query	Bank's Reply
		Backup Devices for Storing the Sign & Encryption Certificates.	Certified Memory of HSM & Private Keys should never be available in software or application layer in any form and to take backup it should support FIPS 140-2 level 3 Smartcards/HSM Backup Devices for Storing the Sign & Encryption Certificates.	
24.	Additional terms and conditions: Technical Requirements for CTS (Category-I) Subsection :A. TECHNICAL REQUIREMENTS	1.HSM Type & Model Thales Luna A750 Network HSM (Hardware Security Model)	Request you to change it for multiple OEM participation Request you to change it to: HSM Type & Model FIPS 140-2 level 3 Network HSM (Hardware Security Model)	This GeM bid clause is modified as: 1.HSM Type & Model: Network HSM (Hardware Security Model)

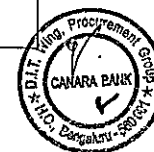| Sl. No.	GeM bid Clause	Clause/ Technical Specification	Bidder's Query	Bank's Reply
25.	Additional terms and conditions: Technical Requirements for CTS (Category-I) Subsection :A. TECHNICAL REQUIREMENTS	6.Partition Virtual NETWORK HSMs • NETWORK HSM should have capability to support minimum 5 applications & minimum 5 partition/instances as per Banks requirement during the contract period.	Should HSM be capable of expanding more than 5 partitions as this statement limits the Bank capability to to scale and there will additional cost when bank requires more partitions as Bank expand its application infrastructure ? Request you to change it to: NETWORK HSM should have capability to support minimum 5 applications & minimum 5 partition/instances as per Banks requirement during the contract period with scalability option of more 100 or more partitions on same HSM without additional cost.	Bidder to comply with GeM bid terms and conditions.
26.	Additional terms and conditions: Technical Requirements for CTS (Category-I) Subsection :A. TECHNICAL REQUIREMENTS	7.Host Connectivity • 4x 1 Gigabit Ethernet ports • IPV4 and IPV6 support	Should HSM be capable of handling 10GB or fibre network connectivity as Bank network upgrades ? Request you to change it to: Host Connectivity • 2x 1 Gigabit Ethernet ports and 2x 10 Gigabit Ethernet ports • IPV4 and IPV6 support	Bidder to comply with GeM bid terms and conditions.

Sl. No.	GeM bid Clause	Clause/ Technical Specification	Bidder's Query	Bank's Reply
27.	Additional terms and conditions: Technical Requirements for CTS (Category-I) Subsection :A. TECHNICAL REQUIREMENTS	8.Client licenses • Minimum 12 client licenses are required.	HSM should not have any charges for connectivity? Request you to change it to: Client licenses • HSM should not limit on client licenses required and all cost should be considered from Day1.	Bidder to comply with GeM bid terms and conditions.
28.	Additional Terms and conditions Technical Requirements for CTS (Category-I) Subsection :A. TECHNICAL REQUIREMENTS	11.Cryptographic Transfer • Full Suite B support• Asymmetric public key algorithms: RSA ,ECC, Diffie-Hellman, DSA, ECDSA, ECDH, ECIES• Symmetric algorithms: AES, ARIA, CAST, HMAC, SEED, Triple DES, DUKPT, BIP32• Hash/Message Digest:SHA-1,SHA-2(224,256,384,512 bit)• Random Number Generators -designed to comply with AIS• 20/31 to DRG.4 using HW based true noise source alongside• NIST 800-90A compliant CTR-DRBG	Please only use FIPS approved algorithms and some are supported by single vendor only Please check this·FIPS reference :https://csrc.nist.gov/csrc/media/ publications/fips/140/2/final/docu ments/fips1402annexa.pdfBIP32 is for bitcoin. request you to remove it Random Number Generator is specific to single vendor. Request you to change it to FIPS complaint Random Number Generator as FIPS is the certification used to measure security level of HSM . Also it is specific to single vendor only . Request you to change it to:Cryptographic Transfer • Full Suite B support• Asymmetric public key algorithms: RSA ,ECC, Diffie-Hellman, DSA, ECDSA, ECDH, ECIES• Symmetric algorithms: AES,	Bidder to comply with GeM bid terms and conditions.

Sl. No.	GeM bid Clause	Clause/ Technical Specification	Bidder's Query	Bank's Reply
			HMAC, Triple DES, DUKPT• Hash/Message Digest:SHA-1,SHA-2(224,256,384,512 bit)• Random Number Generators -designed to comply with AIS• 20/31 to DRG.4 using FIPS complaint mechanism only.	·
29.	Additional terms and conditions: Technical Requirements for CTS (Category-I) Subsection :A. TECHNICAL REQUIREMENTS	16.Speed RSA 2048 bit signing performance must be atleast 5000/second ECC 256 bit prime curve signing performance must be atleast 10,000/second	5000 Transaction Signing per Second(TPS) @ RSA 2048 is an overkill as it does 180 lakhs transaction per hours and ECC 10000 TPS per second provides 360 lakhs transactions . Also this is Thales OEM specifc HSM model . Request you to change it to 500 RSA TPS per second and 1000 ECC TPS . 5000 Transaction Signing per Second(TPS) @ RSA 2048 is overkill and provides 180 lakhs transactions per hour where as 500 Transaction Signing per Second(TPS) @ RSA 2048 provides 18 Lakhs transaction per hour and ECC 10000 TPS per second provides 360 lakhs transactions . Request you to change it to:	Bidder to comply with GeM bid terms and conditions.

Sl. No.	GeM bid Clause	Clause/ Technical Specification	Bidder's Query	Bank's Reply
			Speed RSA 2048 bit signing performance must be atleast 500/second ECC 256 bit prime curve signing performance must be atleast 1000/second	
30.	Additional terms and conditions: Technical Requirements for UPI(Category-II) Subsection :B. TECHNICAL REQUIREMENTS	3.Capabilities & Performance Support up to: 10000 TPS @RSA 2048 Partitions: Minimum 10 and extendable to 100 partitions. SHA 256	10000 Transaction Signing per Second(TPS) @ RSA 2048 is an overkill as it does 360 lakhs transaction per hours. Also this is Thales OEM specific HSM model . Request you to change it to 1000 TPS per second . Why does limit partitions capability to 100 partitions and all partitions should on day 1 without additional cost ? 10000 Transaction Signing per Second(TPS) @ RSA 2048 is overkill and provides 360 lakhs transactions per hour where as 1000 Transaction Signing per Second(TPS) @ RSA 2048 provides 36 Lakhs transaction per hour. Request you to change it to:	The GeM bid clause is modified as under: 3.Capabilities & Performance Support up to: 8000 TPS @RSA 2048 Partitions: Minimum 10 and extendable to 100 partitions. SHA 256

Sl. No.	GeM bid Clause	Clause/ Technical Specification	Bidder's Query	Bank's Reply
			Support up to: 1000 TPS @RSA 2048 Partitions: Minimum 100 partitions from Day 1. SHA 256	
31.	Additional terms and conditions: Technical Requirements for UPI(Category-II) Subsection :B. TECHNICAL REQUIREMENTS	4.Cryptography RSA(2048), DSA, HASH(SHA 256),ECDSA,AES,TRIPLE-DES BIP32 algorithm for Wallet encryption should be supported.	BIP32 is for bitcoin. request you to remove it as this has nothing to do with UPIRequest you to change it to: Cryptography RSA(2048), DSA, HASH(SHA 256),ECDSA,AES,TRIPLE-DES	The GeM clause is modified as: 4.Cryptography RSA(2048), DSA, HASH(SHA 256),ECDSA,AES,TRIPLE-DES for Wallet encryption should be supported.
32.	Additional terms and conditions: Technical Requirements for UPI(Category-II) Subsection :B. TECHNICAL REQUIREMENTS	6.API Support • PKCS#11, Java (JCA/JCE), Microsoft CAPI and CNG, OpenSSL • REST API for administration	Rest API is raw API and Bank to put development efforts to for administration. Request you to change it to HSM GUI and prevent any hidden development cost to bank . Request you to change it to: API Support • PKCS#11, Java (JCA/JCE), Microsoft CAPI and CNG, OpenSSL • GUI for administration	The GeM clause is modified as 6.API Support • PKCS#11, Java (JCA/JCE), Microsoft CAPI and CNG, Open SSL,GUI/CLI(Command line interface) • REST API for administration.

Sl. No.	GeM bid Clause	Clause/ Technical Specification	Bidder's Query	Bank's Reply
33.	Additional terms and conditions: Technical Requirements for UPI(Category-II) Subsection :B. TECHNICAL REQUIREMENTS	10.Client License 2 per HSM	HSM should not have any charges for connectivity? Request you to change it to: Client licenses • HSM should not limit on client licenses required and all cost should be considered from Day1.	Bidder to comply with GeM bid terms and conditions.
34.	Additional terms and conditions: Technical Requirements for UPI(Category-II) Subsection :B. TECHNICAL REQUIREMENTS	15.Partitions Minimum 10 partitions and Maximum 100 partitions	Why put limit on HSM scalability? Request you to remove limitation of 100 partition and make it more than 100 partitions Request you to change it to: Partitions Minimum 10 partitions and Maximum should be more than 100 partitions on same HSM.	The GeM bid clause is modified as under: 15.Partitions Minimum 10 partitions and above.
35.	Additional terms and conditions: Annexure 7 - Certificate by Statutory Auditor / Cost Auditor / Practicing Cost Accountant / Practicing Chartered Accountant of the bidder towards Local Content	Certificate by Statutory Auditor / Cost Auditor / Practicing Cost Accountant / Practicing Chartered Accountant of the bidder towards Local Content	We request the bank to remove the annexure. Considering we being SI and authorized partner for the OEM, certificate requested from the bidder for the devices (OEM's product) may not be possible. OEM will provide declaration confirming local content. We would request the Bank to accept the same	Bidder to comply with GeM bid terms and conditions.

Sl. No.	GeM bid Clause	Clause/ Technical Specification	Bidder's Query	Bank's Reply
36.	Additional terms and conditions: Annexure-11	Bill of Material	With reference to the Bill of material requested. We do not have any provision to upload the documents on the Gem Portal. As per the Gem we need to provide commercial clubbed together for Category I and Category II along with the AMC percentage. We assume only successful bidder needs to provide the annexure 11 with the price break up. We request the Bank to clarify on the same.	Only successful bidder needs to provide the annexure 11 with the price break up.
37.	Additional terms and conditions: Delivery, installation and maintenance	The delivery of all HSMs as per technical specifications and scope of work should be within Seven (7) weeks from the date of acceptance of the Purchase Order	We request the Bank to change the clause to the delivery should be within 14-16 weeks. We ensure the bank to speed up the delivery process. However based on the OEMs current commitment we request the Bank to amend the clause accordingly	The GeM bid clause is modified as under: "10. Delivery, installation and maintenance: 10.2. The delivery of all Network HSMs as per technical specifications and scope of work should be within Twelve (12) weeks from the date of acceptance of the

Sl. No.	GeM bid Clause	Clause/ Technical Specification	Bidder's Query	Bank's Reply
				Purchase Order. Please note that no extra charges will be paid for those locations where road permit is required. The <u>selected bidder</u> has to arrange for road permit at his own cost. It will be the sole responsibility of <u>the selected bidder</u> to submit any form required for release of shipment from the check post."
38.	Additional terms and conditions: Delivery, installation and maintenance	The selected bidder should ensure installation, configuration, Integration and commissioning of the delivered Hardware and complete all the works specified in the Scope of Work at the bank location within Two (2) weeks	We assure the Bank within 2 weeks of delivery we are going to install the HSMs at the DC and DR. However, Integration with the respective applications requires infra and other readiness forms the Bank side and has dependency. Considering the same we request the bank to amend the clause HSMs should be installed at DC and DR within 2 weeks of delivery and commissioning shall be completed	Bidder to comply with GeM bid terms and conditions.

Sl. No.	GeM bid Clause	Clause/ Technical Specification	Bidder's Query	Bank's Reply
			post readiness confirmation from the Bank.	
39.	Additional terms and conditions:Scope of work for UPI(Category-II)	34.The proposed Network HSM should able to: a) Integration with Event & Syslog Management. b) Integration with SIEM Solution. c) Integration with Event correlation engine tools. d) Integration with any ITSM tool. e) Integration with configuration management tool.	HSM supports point number a and b Other points (c, d, and e) are normally for the device/application monitoring tools. Since HSM is a security device it is not recommended that these types of tools to be integrated with HSM. We request the Bank remove these points	The GeM bid clause is modified as under: The proposed Network HSM should able to: a) Integration with Event & Syslog Management b) Integration with SIEM Solution

Sl. No.	GeM bid Clause	Clause/ Technical Specification	Bidder's Query	Bank's Reply
40.	Additional terms and conditions: Technical Requirements for UPI(Category-II)	9.Highest Security & Compliance: • Keys always remain in FIPS-validated, tamper-evident hardware • Meet compliance needs for GDPR, eIDAS, HIPAA, PCI-DSS, • Multiple roles for strong separation of duties • Multi-person MofN with multi-factor authentication for increased security • Secure audit logging • High-assurance delivery with secure transport mode	Please confirm if you are looking for multifactor authentication? We request you to delete the point	The GeM bid clause is modified as under: 9.Highest Security & Compliance: • Keys always remain in FIPS-validated, tamper-evident hardware •Meet compliance needs for GDPR, eIDAS, HIPAA, PCI-DSS, • Multiple roles for strong separation of duties • Secure audit logging • High-assurance delivery with secure transport mode
41.	Additional terms and conditions: Network Hardware Security Module	Minimum 50% and 20% Local Content-required for qualifying as Class 1 and Class 2 Local Supplier respectively	We request the Bank to rectify Minimum 50% or (instead of and) 20% local content.	Bidder to comply with GeM bid terms and conditions.

Date: 30/12/2022
Place: Bengaluru

Deputy General Manager