National Law University, Delhi

Sector-14, Dwarka, New Delhi-110078 India

BID No: -Advt. No: NLUD-LIBRARY/2024/3-17 Dated 8th June 2024

APPOINTMENT OF AGENCY FOR PROVIDING TURNKEY SOLUTION TOWARDS SUPPLY AND DEPLOYMENT OF HYBRID (RFID+EM) BASED HARDWARE SYSTEMS INCLUDING THE SYSTEM INTEGRATION, SOFTWARE SYSTEMS, OTHER HARDWARE SYSTEM AND PERIPHERALS ALONG WITH MAINTENANCE AGREEMENTS WORKING WITH THE EXISTING HYBRID (RFID+EM) SYSTEM

INVITATION FOR BIDS

APPOINTMENT OF AGENCY FOR PROVIDING TURNKEY SOLUTION TOWARDS SUPPLY AND DEPLOYMENT OF HYBRID (RFID+EM) BASED HARDWARE SYSTEMS INCLUDING THE SYSTEM INTEGRATION, SOFTWARE SYSTEMS, OTHER HARDWARE SYSTEM AND PERIPHERALS ALONG WITH MAINTENANCE AGREEMENTS WORKING WITH THE EXISTING HYBRID (RFID+EM) SYSTEM

BID Reference No	**NLUD-LIBRARY/2024/3-10**
Date of Publishing of Notice Inviting Tenders	**12th June 2024**
Date of commencement of availability of Bid Document	**12th June 2024**
Last date and time of receipt of bids	**27th June 2024 till 3 PM**
Bid Security	**Rs. 50,000/- In a form of Demand Draft issued in favour of "THE REGISTRAR, NATIONAL LAW UNIVERSITY DELHI" which will be refundable to unsuccessful bidder within 180 days from the date of opening of the Prequalification bid.**
Validity period of Bid Security / EMD	**180 Days**
Proposal validity period	**For a period of "SIX MONTHS" and for a further period of "ONE MONTH" as an exigency for any unforeseen delay in evaluation and award of contract to the successful Bidder, from the date for submission of the bids**
Place of submission of bids	**Main Reception, Academic Block, National Law University Delhi, Sector-14, Dwarka, New Delhi-110078**
Address for Communication	**To, The Registrar National Law University Delhi Sector-14, Dwarka, New Delhi-110078**
Tender can be downloaded from	www.nludelhi.ac.in

Note:

1. Prospective bidders are encouraged to undertake a preliminary study of the site, at their own cost.
2. The University reserves the right to reject any or all the bids in whole or in part at any time without mentioning the reason thereof.
3. Technical and financial bid should be submitted separately.

INTRODUCTION & SCOPE OF WORK

1. In its endeavor to automate the security functionality of the working of Justice T.P.S. Chawla Library of National Law University Delhi intends to secure its library in its campus situated at Dwarka, Delhi.

2. University is already using a hybrid system with the required hardware pertaining to Dialoc ID Firm. The proposed system must work with this existing system.

3. The process is intended to:

   a. Provide a robust, efficient, and user-friendly system for student/staff service.
   b. Promote tighter monitoring and control of all the processes at the library.
   c. Evolve into a self-service portal for all stakeholders to obtain information promptly and serve as an effective management tool for Institute library officials.

4. This project requires the selected bidders to provide services speedily and with certainty to the University. The successful bidder will have to provide hardware and software which is compatible to the existing RFID Chips and EM Tags attached/fixed with the library documents.

5. The successful Bidders (vendor) will be responsible for:

   a. Initial site survey for installation and deployment.
   b. Supply of Hardware and Software systems in accordance with the specifications laid out in this document. The selected bidder shall be responsible to supply, install, test, integrate and commission, operate & maintain all the hardware, allied accessories and software required for the project for the entire project duration and as per the minimum bill of material/ technical specifications described in this bid document.
   c. Coordination with library Officials for smooth deployment and installation of the system.
   d. Documentation of the new systems.
   e. Training of the Library and IT staff in installation and troubleshooting of the deployed solution.
   f. Vendor shall ensure that product being supplied is supported by the OEM during the entire contract period and the OEM has not declared End of life of the product at the time of supply.

BILL OF MATERIAL

S.No	Item	Quantity
1	Hybrid Gate – Detection of both EM & RFID Tags already installed/fixed with the library documents	1
2	Hybrid Workstation for Circulation	1
3	RFID Workstation for conversion	1
4	Hybrid Self Check System – Using both EM & RFID	1
5	Smart Card Printer	1
6	Smart Cards with pre-printed templates of the NLUD (To be provided to successful bidder)	1000
7	RFID Tags	2000
8	EM Tags	2000

Note: The quantity mentioned above may vary for certain items at the time of implementation, as per the requirement of the department. The decision of competent authority in this behalf will be final. For any increase or decrease of items, the unit rate shall determine the actual payable amount. The quantity mentioned above for the respective phases or in totality may vary as per the requirement and payment will be made as per actual.

TECHNICAL BID

Section - I

Eligibility Criteria for participating in the Tender

S. No	Description	Document Required	Page No.
1	Please provide the name, address, and the other details of the OEM/Bidder.	Valid certificates	
2	Please provide full details of factory/manufacturing units for each item for which the bid is invited.	OEM Certificates	
3	OEM/Bidder must be an ISO 9000/9001/9002 certified company consistently	Valid certificates	
5	OEM/Bidder must have 10+ years of experience supplying and servicing products in libraries	Valid certificates	
6	OEM/Bidder must have an average turnover of at least Rs. 6 crores in business in India/Globally for past 3 financial years	Annual reports	
7	Bidder must provide evidence that at least 2 libraries having used its hybrid system on at least 100,000 books. Third party certificate will not be acceptable.	Satisfaction certificates (along with contact details) from two libraries where installation has been completed more than 2 years back are required.	
8	Bidder must show evidence that OEM's systems are working on industry standard platforms and not any OEM specific hardware / software.	Certificates	
9	The bidder must be an Original Equipment Manufacturer (OEM) of RFID hardware components or an Authorized Distributor of OEM of RFID hardware components or a System Integrator having experience in RFID Solutions. Company registration details in terms of PAN Card and OEM certificate to be provided with the BID.	PAN Card Company, Incorporation Certificate, Company GST Certificate, OEM Certificate	
10	The complete solution proposed by the bidder must include supply and installation of RFID components, development and operation of software components and RFID Consumables in an integrated manner. Integration should be possible directly through SIP2 without any middle ware components.	OEM Certificate Bidder Declaration	
11	The bidder must have a prior experience of working with a Government Institution / Institute / Department.	Provide a list customer with contact details	
12	Bidder should provide a list of minimum 10 libraries within India which have been using RFID + EM Hybrid System from the same bidder/OEM.		
13	All products must comply with internationally recognized standards for RFID-based Library self-service systems. Certificate from OEM Should be provided to that effect.	OEM Certificates	

| 14 | Bid may be rejected at any stage of the evaluation if it is found that the company:
   a. Has provided misleading information.
   b. Has been banned / blacklisted by a central or state government.
   c. Has indulged in any malpractice/ unethical practice.
   d. Has not honored contractual obligation elsewhere | Self-Declaration Certificate by the bidder | |

SECTION II

General Requirements

Sr. No	Description	Document Required	Doc. Supplied (Y/N)	Provide page no in bid
1	All system components must be UL, CE, and FCC Part 15-Certified; SIP2, RS-232, TCP/IP Ethernet 10/100, 802.11b (wireless) compliant	OEM Certification		
2	The proposed system must provide application-specific software to incorporate all RFID Library related hardware (detection systems, staff station readers, cataloging stations, patron self-check stations, inventory, book issue and book return system), the circulation RFID tags and any other RFID-related hardware into the system. The Software system must support all general features of the library system for RFID automation even though they might not be part of the system right now. Such functionalities are required in the system to keep future upgrades possible	OEM Certification		
3	The proposed system must not interfere with other equipment that may be nearby. The proposed system must be able to connect through the Library's Ethernet network via an RJ-45 connector and/or secured wireless network. 1. The RFID system must be ISO 15693 18000-3 Mode 1 Compliant and must use Reader Talks First (RTF) Architecture.	OEM Certification		
4	All the RFID & EM components proposed in the system should be manufactured by a single OEM, to ensure seamless compatibility and single source for supply and support. Part bid/assembly of RFID & EM components from different OEMs by the Bidder is not acceptable	Certification		
5	It is important that the bidders point out clearly in their bid, any deviation in the software and hardware specification (if any). If any deviation if found later and is not specified in the bid, it will result in complete rejection of the bids.	Bidder Certification		
6	Bidder must provide an affidavit stating that products or major sub-components being proposed by the bidder are not manufactured or supplied by Chinese companies.	Bidder Certification		
7	The bidder must provide and be responsible for the complete solution and partial bids or conditional bids shall not be acceptable	Bidder Certification		
8	The bidder will have to provide hardware and software which is compatible with the existing hardware and systems installed in the library. The existing system was provided by Dialoc ID. If required, the bidder can visit the library to understand the existing system.	Bidder Certification		
9	The bidder must provide tender specific authorization by Dialoc ID that they shall supply & support the bidder during the supply & warranty period. If required to confirm the validity of the certificate, the institution reserves the right to ask for an email confirmation from Dialoc ID			

10	The successful bidder may be required to showcase its technical competence of working with the existing hardware and software.		
11	Period of Maintenance offered		

TECHNICAL SPECIFICATION

SECTION III

SECTION III- A

Staff Station for Personalization & Circulation of books and cards

No	Description	Compliance (Y/N)
1	For circulation and conversion operations at the staff desk. It physically should consist of a combined hybrid station (EM & RFID) unit from the manufacturing level. There should be no separate Reader & Antenna. Only data and power cables should be connected to the unit. It should be able to process both EM and RFID tags.	
2	The RFID antenna shall be fully shielded, i.e. not read items placed under the table and on the side of the antenna pad	
3	The staff station shall be able to program and verify multiple RFID tags placed on the antenna	
4	The staff station will enable the security status of the tag to be changed without interaction with the LMS	
5	The staff station connects to the PC via USB only	
6	Suitable software for integrating the RFID functions into the circulation workflow and for tagging library items will be provided with the equipment	
7	Design: Easy to use space-saving, ergonomic design and interface and should Include feedback indicators	
8	Software for Circulation of the items using SIP2 only without any middleware	
9	Software for Circulation should not be through keyboard input or screen mapping into the LMS software. It should be an independent software which can be used for Circulation using Card Reader & biometric for patron Identification and RFID reader for Book Identification	
10	The software system provided should be able to provide detailed MIS for the tagging. It should be able to generate the lists for the tagging of the items with the time stamp, Accession No & Tag Id	
11	For circulation processes the software should be able to provide an MIS for all the checked out and checked in items with patron details	
12	Energy Profile: 200-240 VAC, 2.0/1.0 A, Single phase	
13	The staff station should also support patron card reader for ISO 14443A cards with application for card programming and reprogramming. Standards & Protocols: ISO 14443 A/B with up to 848 kbps transmission rate (depending on card), ISO 15693 with up to 26 kbps transmission rate (depending on card), T=CL	
14	Staff station should have an STQC certified Biometric Scanner integrated with the application software.	
15	It should be possible to use the circulation software after doing the biometric based authentication as well. Biometric device to be supplied for the authentication along with the computer application and PC.	

SECTION III- B

No	Hybrid Electromagnetic & RFID Detection Gate System dual Description	Compliance (Y/N)
1	Detect genuine EM & RFID Tags in any orientation	
2	External devices, such as CCTV and/or barriers can be connected	
3	The system incorporates visual and audible alarms	
4	The alarm system has flexible light in different colours	
5	The visual alarm can be configured to flash corridor specific or give a full system alert	
6	The audible alert has a variable alarm pattern and adjustable volume	
7	The system should incorporate an energy saving function that can remain in a low energy state until the people counter detects movement	
8	The gates shall provide full detection from 0 to 100cm between the panels	
9	It shall obtain optimal detection performance at a pedestal distance of 100cm	
10	The system should be provided with 'False positive filtering', reducing false alarms caused by foreign objects	
11	The system shall be built on a master – slave principle with up to 6 pedestals (5 gates) in one single system for future upgrades.	
12	The system shall provide multiple gate installation up to 5 gates	
13	The weight per gate should not be more than 30 KG	
14	The system should be able to detect both type of tags (RFID & EM) on the items	
15	The antenna's mounting points must be easy to install	
16	The system shall provide a Baseplate for easy install available for single or dual gate installations	
17	The antennas shall have side panel designed for applying customizable vinyl graphics for promotion activities. The institute will provide the content which is to be printed on these panels. Printing & application in the vendor's scope.	

SECTION III- C

No	Hybrid Self Check In Check Out System Description	Compliance (Y/N)
1	The kiosk shall be free standing.	
2	The housing shall be made of metal only enclosures; no wooden items acceptable.	
3	The housing covers computer hardware, wiring and power supply and can be locked. No wires or peripherals should be accessible from outside	
4	The system shall have minimum 2 external USB connectors for service & maintenance	
5	The system shall have a 19/22" touch screen	
6	The system shall have indicators to guide the patron through the process	

7	The system shall have an easily accessible integrated printer	
8	The system shall have a thermal printer that can print paper rolls with a maximum width of 80mm	
9	The system shall be able to check in and out library items based on RFID & EM	
10	The system shall support check-in and check-out using the combination RFID or barcode and EM strips	
11	The system shall have perfect shape to supports a maximum item size	
12	The system shall be able to detect multiple items and secure single item processing	
13	All user elements should be placed within DDA/ ADA range (for wheelchair drivers)	
14	The system shall Identify users with Barcode, RFID, Mifare	
15	The system shall be audio enabled to have the possibility for extended communication with the patron	
16	The kiosk shall have a graphic wrap. Content for the graphic wrap will be provided by the library, however its printing and application will be in vendors scope.	
17	The software shall enable checking library items in and out based on a SIP2 connection to the library management system	
18	The software shall enable patrons to check their account (items borrowed and expiration per item, fees and fines) and to prolong (if the library choose to allow for it)	
19	When processing library items (checking in-or out) the status of each item shall be displayed ((incl. the setting of the security bit and type of item (i.e. books, CD, DVD's, Blu-ray and games)	
20	The software shall allow to integrate payment functionality at a later stage (cash (coins & notes) and chip & pin cards, without software charges.	
21	The software shall allow the library to choose between several standard themes designs, also children's themes.	
22	The software enables a patron to complete all functions (check in, check out, check account, payments) under one login, making the transaction process easy and smooth.	
23	The software shall have a possibility to display/promote Library activities	
24	The software can be configured to continue working in offline mode when the connection to the LMS has failed. The software shall continue to let patrons borrow and return items to provide a continuous service; then once the connection to the LMS has been restored, all offline transactions shall be automatically uploaded to the LMS ensuring that all transaction history has been updated. If transactions fail to upload correctly then the staff will be alerted automatically	
25	The software contains a communication link to an intranet-based monitoring system and will cope with the requirements defined for that system.	
26	The software contains a tool to customize and run detailed reports from one location	

SECTION III- D

No	Smart Card printing system	Compliance (Y/N)
	Description	
1	Resin thermal transfer printer with minimum 300 dpi	
2	Accepts minimum 100 ISO sized cards	
3	Printer with dual side color printing technique and system control display	
4	Connection of the printer should be possible through USB, LAN and wifi	
5	Printer should have inbuilt capability to print and program the cards in a single process. Printer encoding should support Mifare chips. No external device to be connected.	
6	Software to print the cards on both the sides should also be provided.	
7	Printing software should support direct connection with LMS for direct printing, without any middleware.	
8	It should be possible to import data using excel files into printing software.	
9	The library should be able to create multiple designs/templates for the printing process and it should be possible to select a particular type of design at the time of printing. There should be no limitation and dependence on the layouts & types of cards to be printed.	
10	The software should support printing and programing of the cards.	
11	The software should provide all MIS of the cards printed & programmed and all the data imported into the system.	

SECTION III- E

No	Smart Cards, printer and other consumables	Compliance (Y/N)
	Description	
1	Preprinted Smart Cards with Original NXP Mifare 4K Chips to be supplied	
2	Pre-printed with the Institute Approved Design (Static text)	
3	Programmed with Institute provided details (software application to be supplied)	
4	Memory of Cards: Minimum 4K	
5	Size of Cards: ISO ID Card Standard	
6	Identity ISO Standard: ISO 14443A/B	
7	Only original NXP Mifare 4K Chips to be provided. The genuineness of the NXP cards will be validated using the Tag Info app provided by NXP, downloaded from NXP website. Samples to be provided with the technical bid.	
8	Only first sector to be used for the library setup. The remaining space will be used by the institution for future multiple applications. Vendor must supply the software application for the printing and programming of the cards	
9	Vendor should supply consumables for printing of these cards including but not limited to the ribbons and cleaning cards	

10	Vendor needs to mention in the technical bid about how many cards a particular ribbon can print and how many ribbons are being supplied.	
11	RFID Tag compatible with the hybrid system offered	
12	EM Tag compatible with the hybrid system offered	

FINANCIAL BID

BILL OF MATERIAL

S.No	Description	Cost Offered per unit	Itemize Costing
1	Hybrid Gate – Detection of both EM & RFID Tags already installed/fixed with the library documents		
2	Hybrid Workstation for Circulation		
3	RFID Workstation for conversion		
4	Hybrid Self Check System – Using both EM & RFID		
5	Smart Card Printer		
6	Smart Cards with pre-printed templates of the NLUD (To be provided to successful bidder)		
7	RFID Tags		
8	EM Tags		

Note: The quantity mentioned above may vary for certain items at the time of implementation, as per the requirement of the department. The decision of competent authority in this behalf will be final. For any increase or decrease of items, the unit rate shall determine the actual payable amount. The quantity mentioned above for the respective phases or in totality may vary as per the requirement and payment will be made as per actual.