

**E-TENDER  
FOR  
DESIGN, SUPPLY, INSTALLATION, TESTING,  
COMMISSIONING  
AND  
POST WARRANTY ANNUAL MAINTENANCE  
OF  
ACTIVE 3D PROJECTORS BASED SETUP  
AT  
VIRTUAL EXPERIENTIAL MUSEUM,  
VARANASI**



**NATIONAL SCIENCE CENTRE  
(NATIONAL COUNCIL OF SCIENCE MUSEUMS)  
BHAIRON ROAD, NEAR GATE NO. 2, PRAGATI MAIDAN  
NEW DELHI – 110 001**

**NATIONAL SCIENCE CENTRE**  
(National Council of Science Museums)  
Bhairon Road, Near Gate No. 2, Pragati Maidan,  
New Delhi – 110001

**NOTICE INVITING E-TENDER**  
**TENDER No. NSCD/18011/E-Tender - 16/18-19**

Online digitally signed E-Tenders are invited for Design, Supply, Installation, Testing, Commissioning & Post Warranty Annual Maintenance of Active 3D Projectors based setup at Virtual Experiential Museum, Varanasi (Uttar Pradesh) as per the Centre's Technical specification. Agencies that have experience for the said work may download the Tender Documents from Central Public Procurement Portal (CPPP): <http://eprocure.gov.in/eprocure/app> or from Centre's website [www.nscdelhi.org](http://www.nscdelhi.org) or [www.nscd.gov.in](http://www.nscd.gov.in) as per the following schedule:-

Bid Document Published Date	02nd July, 2018 (6:55 P.M)
Bid Document Download Start Date	02nd July, 2018 (6:55 P.M)
Bid Clarification Start Date	02nd July, 2018 (6:55 P.M)
Bid Submission Start Date	03rd July, 2018 (10:00 A.M)
Pre Bid Meeting**	05th July, 2018 (3:00 P.M)
Bid Clarification End Date	05th July, 2018 (05:00 P.M)
Bid Submission End Date	11th July, 2018 (03:00 P.M.)
Technical Bid Opening Date	12th July, 2018 (03:00 P.M.)
Technical Bid Presentation Date	12th July, 2018 (3:00 P.M.)
Estimated Cost of Work	₹60 Lakh
Earnest Money Deposit	₹1,50,000/-
Period of Completion of Work	30 days

Note\*\* – Pre-Bid Meeting and Technical Bid Presentation shall be held at Conference hall of NSC, Delhi

The online bid both Technical Bid and Financial Bid, should be uploaded by the due date and time as per the above schedule. The responsibility to ensure the same lies with the bidders. Off-line tenders shall not be accepted and no request in this regard will be entertained whatsoever. Online Technical Bid will be opened at the first instance in National Science Centre, Delhi at 03:00 P.M. on 12th July, 2018 for technical evaluation as well as selection of technically acceptable offers. In the second stage, the Financial Bids of only the selected and techno-commercially acceptable offers / system / equipment will be opened. Decision of the Centre, regarding selection of eligible and qualified vendors / firms for opening the Financial Bid shall be final and binding on the bidders. Bidders may be present during opening of tenders.

NSC Delhi reserves the right to accept or reject any or all tenders in full or part without assigning any reason whatsoever. NSCD shall also not be bound to accept merely the lowest tender but the technical suitability, capability and superiority of the equipment / system as well as after sales service including infrastructure to render such service, etc. shall be of prime consideration for selection of the equipment /system.

### **CHECK LIST**

Check list of Tender No. NSCD/18011/E-Tender - 16/18-19 for Design, Supply, Installation, Testing, Commissioning & Post Warranty Annual Maintenance of Active 3D Projectors based setup at Virtual Experiential Museum, Varanasi (Uttar Pradesh)

Sl. No.	Description	Yes	No
01.	Whether E-Tender uploaded in Two parts (i.e. Technical & Commercial) separately. Please note that one set of original signed bid must be delivered at NSC, Delhi before the time of opening Technical Bid.		
02	Whether Tender documents carefully studied & understood.		
03	Whether Tender documents duly signed and stamped on all pages is scanned and uploaded as Part – I of the Tender in Central Public Procurement Portal.		
04	Whether Earnest Money of <b>₹1,50,000/-</b> submitted by Online / Demand Draft No. ....dated..... and Scanned copy of DD uploaded as Part – I of the Tender. Please note that the original DD should be couriered /hand delivered to NSC Delhi / online payment details shall be sent to NSCD before the opening time of Technical Bid.		
05	Whether Declaration regarding Non-relation, duly signed and stamped, and scanned copy of the same uploaded as Part – I of the Tender in Central Public Procurement Portal. <b>Annexure C</b>		
06	Whether Declaration certifying that there is no extra conditions quoted in the Offer Form duly signed and stamped, and scanned copy of the same uploaded as Part – II of the Tender in Central Public Procurement Portal. <b>Annexure - C</b>		
07	Did you visit the actual site for execution of the work?		

Date:

Signature of the Tenderer

Place:

Official Seal

## **General Information and Instructions**

1. The instructions given herein will be strictly binding on the bidders and deviation, if any will make the tender or tenders liable to be considered invalid. Tenders incorporating additional conditions by the bidder are liable for rejection.
2. Bids shall be submitted online only at CPPP website: <https://eprocure.gov.in/eprocure/app> Manual bids shall not be accepted.
3. The instructions given in “Annexure-A” for “Instruction for Online Bid Submission” should be strictly followed during submission of the Bid.
4. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
5. An agent of foreign OEM, for submitting the offer on behalf of OEM, would be required to produce a copy of their legal bid agreement with their principal as an Indian agent failing which their bid would be disqualified.
6. Bid should be submitted along with the Earnest Money of **₹1,50,000/-** (Rupees One Lakh Fifty Thousand only) by way of crossed Demand Draft / Pay Order on any of the commercial banks or payment online by NEFT / RTGS payable in favour of “**NATIONAL SCIENCE CENTRE**”, payable at Delhi. Earnest Money deposit in the form of Bank Guarantee /Bond or any other instrument shall not be accepted and shall be rejected straightway. Earnest Money deposits in respect of such offers which are not accepted will be returned to the bidders within 30 working days from the date on which the final decision is taken about the source from which the items under tender are to be procured or within 2 (two) months from the date of the opening of the tenders, whichever is earlier. No interest will be paid on the Earnest Money deposited with the Council. Earnest Money deposit in respect of the successful bidders will be retained with the NSCD until entire execution of the order as per terms of the tender. If the successful bidder fails to execute the order strictly as per the NSCD’s drawing & specification in full or part within the stipulated delivery period of the purchase order, the Earnest Money deposit retained with the NSCD shall be forfeited forthwith after cancellation of the concerned order.
7. Validity of Bids: The Bids should remain valid for 90 days from the date of opening of Financial Bid.
8. Rejection of Bids: Canvassing by the Bidder(s) in any form, unsolicited letter and post-tender correction may invoke summary rejection. Conditional tenders will be rejected. Non-compliance of applicable General Information and Instructions will disqualify the Bid.
9. The Bidders should have Digital Signature Certificate (DSC) for filling up the Bids. The person signing the tender documents should be authorized for submitting the on line e-tender.
10. The Bidders shall fill up the Prescribed Format for submission of Technical Bid as per “Annexure-E” format duly signed by the authorized signatory. The person signing the tender document should be authorised for submitting the online e-tender.
11. The Financial Bid (BOQ) shall be filled in and signed by the authorized signatory online as per Proforma “Annexure- G” available at Central Public Procurement Portal e-tender system website <http://eprocure.gov.in/eprocure/app>. off line Financial Bid shall not be accepted.

## **12. DOCUMENTS COMPRISING THE BID:**

The bids prepared by the bidder shall comprise of

(1) The Technical Bid and Technical Presentation

(2) Financial Bid (BOQ)

**BID: -**

Tender must be uploaded in two separate sets- namely set-1 (Technical Bid) and set-2 (Financial Bid). The set-1 will comprise of

**Set - 1**

i) “Technical Bid” (as per Annexure-E format) duly filled in and digitally signed with official stamp. Upload scanned copy.

ii) All relevant documents related to “Technical Bid” as per “Annexure-E”. Upload scanned copy.

iii) The Technical Brochures of each equipment with technical explanation for every feature of the product offered by the bidders. Upload scanned copy.

iv) The scanned copy of the Demand Draft for ₹1,50,000/- (Rupees One Lakh Fifty Thousand only) as Earnest Money Deposit.

v) The scanned copy of “General Terms & Conditions” (Annexure-B) duly signed by the Authorized Signatory with official stamp as a token of acceptance of the bidders.

vi) The scanned copy of “Technical specifications and Scope of Work” (Annexure-D) duly signed by the Authorized Signatory with official stamp as a token of acceptance of the bidders.

vii) PDF of the technical presentation that the bidder is going to present in front of the committee.

viii) Scanned copy of Declarations at Annexure C

ix) Tenderers are required to submit along with the tender in Part-I envelope, details of complete technical specifications, procurement strategy, flow chart of the work, erection strategy and a bar chart on how the work shall be completed within the stipulated time as per Clauses of the General terms and conditions.

**Set-2**

i) The “Financial Bid (BOQ)” (as per Annexure- G format) i.e. Schedule of Price Bid in the form of attached Proforma duly filled in and digitally signed

**N.B.: -**

The bidders shall consider the prevailing tax rates while quoting the rates. However, in the event of any changes in the statutory taxes and duties, the rates applicable at the time of payment shall be made by the competent authority of the NSC, Delhi against submission of supporting documentary evidence.

The Cover-1, i.e. Technical Bid shall be opened by the Centre at the first instance and evaluated by the competent authority of the Centre. The agencies shall be required to make detailed technical presentation on all available options as detailed in Annexure-D (Scope of work and technical specification). At the second stage, the Set-2 containing Financial Bid of only techno-commercially acceptable offers shall be opened for

further evaluation and ranking before awarding the contract. Date of opening of the financial (Price) bid shall be intimated to only such vendors who will be finally qualified at technical stage.

13. Authorities of National Science Centre, Delhi do not bind themselves to accept mere lowest tender and reserves the right to reject or accept any or all tenders wholly or partially without assigning any reason whatsoever.

14. Order shall be placed in favour of a single agency considering the total cost arrived based upon consolidated BOQ as per Annexure-G.

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NATIONAL SCIENCE CENTRE,  
NEAR GATE NO. 2, PRAGATI MAIDAN  
BHAIRON MARG, NEW DELHI-110001

TENDER No. NSCD/18011/E-Tender- 16/18-19

**Instructions for Online Bid Submission**

1. The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.
2. More information useful for submitting online bids on the CPP Portal may be obtained at <https://eprocure.gov.in/eprocure/app>

**REGISTRATION**

1. Bidders are required to enrol on the e-Procurement module of the Central Public Procurement Portal (URL: <https://eprocure.gov.in/eprocure/app> ) by clicking on the link “Online Bidders Enrolment” on the CPP Portal which is free of charge.
2. As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
3. Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
4. Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra etc.) with their profile.
5. Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.
6. Bidders may then log-in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.

**SEARCHING FOR TENDER DOCUMENTS**

1. There are various search options built in the CPP Portal to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords, etc. to search for a tender published on the CPP Portal.
2. Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective “My Tenders” folder. This would

enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.

3. The bidders should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

## **PREPARATION OF BIDS**

1. Bidders should take into account any corrigendum published on CPPP in connection with the tender document before submitting their bids.

2. Please go through the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of sets in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.

3. Bidders, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF / JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.

4. To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates, etc.) has been provided to the bidders. Bidders can use “My Space” or? Other Important Documents” area available to them to upload such documents. These documents may be directly submitted from the “My Space” area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

## **SUBMISSION OF BIDS**

1. Bidders should log-in to the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidders will be responsible for any delay due to other issues.

2. The bidders have to digitally sign and upload the required bid documents one by one as indicated in the tender document.

3. Bidders have to select the payment option as “offline” to pay the requisite Earnest Money Deposit (EMD) and enter detail of the instrument.

4. Bidders should submit the EMD as per the instructions specified in the tender document. The original instrument should be posted/couriered/given in person to the Tender Processing Section at the above address, latest by the last date of bid submission. The detail of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.

5. A standard Price Schedule format (BOQ) has been provided with the tender document to be filled by all the bidders. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BOQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BOQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidders). No other cells should be changed. In case no



rate value is required to be quoted in any particular cell, that cell may be kept blank, figure “0” (zero) shall not be entered in such cell(s). Once the details have been completed, the bidders should save it and submit it online, without changing the filename. If the BOQ file is found to be modified by the bidders, the bid will be rejected.

6. The server time (which is displayed on the bidders? dashboard) will be considered as the standard time for referring the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.

7. All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128-bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid opener’s public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.

8. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.

9. Upon the successful and timely submission of bids (i.e. after Clicking “Freeze Bid Submission” in the portal), the portal will give a successful bid submission message and a bid summary will be displayed with the bid number and the date & time of submission of the bid with all other relevant details.

10. The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

## **ASSISTANCE TO BIDDERS**

1. Any enquiries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority or the relevant contact person indicated in the tender.

2. Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal helpdesk. The contact number for the helpdesk is 1800 233 7315.

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NATIONAL SCIENCE CENTRE,  
NEAR GATE NO- 2, PRAGATI MAIDAN  
BHAIRON MARG, NEW DELHI-110001

GENERAL TERMS AND CONDITIONS FOR SUBMISSION OF TENDER for Design, Supply, Installation, Testing, Commissioning & Post Warranty Annual Maintenance of Active 3D Projectors based setup at Virtual Experiential Museum, Varanasi (Uttar Pradesh). Tenderers are required to submit along with the tender in Part-I envelope, Details with complete technical specifications, procurement strategy and a bar chart on how the work shall be completed within the stipulated time as per Clauses of the General terms and conditions.

1. Price: The rates quoted/indicated shall include cost of all Equipment, labour supervision and all working accessories, tools and tackles, reliable standard testing equipment, etc. and including all handling charges for Supply, Erection, Testing and Commissioning of the system as specified in Annexure-D “Technical specification and Scope of Work”, in the tender document along with warranty (3 Year) of the complete system. The rates of GST and other taxes/levies to be imposed on the cost of the system shall have to be clearly and separately mentioned. Price and rate quoted shall be firm and fixed for the entire period of execution of the work and no escalation of rate on any ground whatsoever shall be allowed. The overall lowest bidder shall be awarded the tender.

The bidders shall consider the prevailing tax rates while quoting the rates. However, in the event of any changes in the statutory taxes and duties, the rates applicable at the time of payment shall be made by the competent authority of the NSC Delhi against submission of supporting documentary evidence.

2. The successful tenderer shall submit the following documents within 07 (seven) days from the date of placement of Letter of Intent.

- i) Duplicate copy of Letter of Intent duly signed and stamped as a token of acceptance of the work order.
- ii) Non-judicial stamp paper of appropriate value for preparing the Agreement governing the terms and conditions of the Contract.
- iii) Security Deposit as detailed in Clause No. 06 of General Terms & Conditions.

3. TIME OF COMPLETION: Time is the essence of the tender. The entire work viz. Design, Supply, Installation, Testing & Commissioning of the system shall be completed in time bound manner. The entire work shall be completed **within 30 (Thirty) days** from the date of placement of Letter of Intent.

For non-compliance of any of the above terms and non-delivery of the tendered item complete in all respects within the above stipulated period, the Centre shall either cancel the order or impose penalty as detailed in Clause 4 below. The Centre reserves the right to cancel the order and no payment will be made under such condition. Decision of the Centre in this regard shall be final and binding on the successful tenderers.

4. PENALTY CLAUSE: The successful Tenderer shall strictly observe the time allowed for carrying out the job as detailed in Clause No. 3. The job shall, throughout the stipulated period of the order be proceeded with all the diligence (time being deemed to be the essence of the order) and the successful Tenderer shall pay to

the Centre, an amount equal to 1% of the amount of the order value for every week that the delivery may remain incomplete as per delivery schedule as stipulated in Clause no. 3, subject to a maximum compensation of 10% of the order value and after that period appropriate action will be taken by the Centre, as it will deem fit.

The Centre may extend the time of delivery of the tendered job at its discretion on the application of the successful tenderer for such purpose provided that it considers the reasons for such extension as good, sufficient and acceptable.

5. Technical Specifications and Scope of work: As per Annexure “D”

6. SECURITY DEPOSIT: The successful tenderer shall deposit 10% of the gross value of the work awarded, as refundable security deposit after adjusting the EMD already deposited with this NIT, which is to be paid Online or in the form of Bank Draft / Banker’s cheque by the tenderer in favour of ‘National Science Centre, Delhi’ as per Bank Details given in the Tender document. The Security Deposit of the successful tenderer shall be released as mentioned below (Warranty period shall be 3 (Three years) from the date of final completion of the work / job). In case the total value of order exceeds the assessed value of the work order, security deposit for the excess amount will also be deducted. No interest shall be paid on the security deposit retained with National Science Centre, Delhi. The Security Deposit of the successful tenderer shall be released as follows: -

- a) 25% after completing 1st year of warranty period.
- b) 25% after completing 2nd year of warranty period.
- c) 50% after completing 3rd year of warranty period

## **7. PAYMENT TERMS:**

a) No advance payment shall be made by the Centre under any circumstances. However, interim payment shall be released at the discretion of the Centre on the following: -

- i) Up to 50% payment may be released after supply of the entire equipment / materials at site.
  - ii) Balance 50% (Final) payment shall be released within 30 days from the date of receipt of Tax-Invoice duly supported by receipted challan and satisfactory inspection / work completion certificate from NSCD authority for the entire job and providing satisfactory operational training to NSCD officials.
- b) Payment shall be released through NEFT/RTGS for which details of bank account shall be mentioned in their bill.

8. In case, the successful Tenderer refuses to accept the offer after finalization or does not comply with the Clause No. 2 within 07 (Seven) days from the date of placement of the order as per the finalized and accepted terms and conditions, the order shall be cancelled forthwith without any further reference and the EMD will be forfeited.

9. DEFECT LIABILITY PERIOD / WARRANTY PERIOD: The Warranty/ Defect Liability period shall be **Three (3) years** from the date of certification of the completion of satisfactory erection and commissioning of the system. The successful tenderer shall be responsible for all defects of the installed equipment or other defects of equipment supplied, etc. for a period of three years from the date of satisfactory completion of the erection and commissioning of the system. The successful tenderer, shall at their own cost, rectify the defects

and or replace the defective parts/equipment, up to the complete satisfaction of the competent authority of the Centre.

10. Clauses of the conditions of contract will be part of agreement between Museum / Centre and the successful tenderer.

11. The contractor must visit the site before quoting his rates in the tender and acquaint himself with site conditions thoroughly. No claims for additional payments would be entertained arising out of contractor's ignorance of site conditions.

12. The rate quoted by the contractor shall include all labour, materials, etc. for executing and completing the work. He should also include in his rate all taxes, duties, freight, etc.

13. The contractor should quote balanced rate. Quantities given in the schedule are tentative and may vary up to any extent. The Museum/Centre reserves the right to execute or to delete any item or increase or decrease any quantity or quantities of the bill of quantities. Rates quoted in the tender shall be binding for all such variation in quantities.

14. Materials to be used in the work shall conform to I.S. specification, if otherwise, not stated specifically.

15. Any deviation from the tender specification, coming as extra or substituted item which are not covered in the tender items need approval of the competent authority of the Museum/Centre. The rates for extra/new/substituted items of work shall be derived from the contract items as far as practicable and rates which cannot be derived from the contract will be fixed on the basis of actual cost of materials and labour plus 10% as contractor's overhead and profit.

16. If the work is suspended by the contractor or unduly delayed without obtaining extension of time, the museum/Centre will serve a notice giving 30 days of time and thereafter the incomplete work will be carried out by engaging other agency and in such cases the difference in cost has to be borne by the contractor.

17. The contract can be terminated by both parties after giving one month written notice to the other. In case of contractor serving the notice, his entire retention money including earnest money will be forfeited and his payment will be determined on actual measurement basis on the date of termination of contractor.

18. In case of any dispute arising between the contractor and the Museum/Centre, the matter shall be referred to the sole arbitration of a person nominated by the Director General, National Council of Science Museums, whose decision in this regard shall be final and binding on both the contractor and the Museum/Centre.

19. Without prejudice to anything contained herein the contractor shall indemnify the Museum/Centre against all claims for compensation under the provision of the Workmen's Compensation Act, 1923 (VIII of 1923) by or in respect of any workmen employed by the contractor in carrying out his contract and against all cost and expenses incurred by the Museum/Centre in connection with any such claims and without prejudice to any other means of recovery, the Museum/Centre shall be entitled to deduct from any money due or to become due to the contractor (whether under this contract or under any other contract) all money paid or payable by the Museum/Centre by way of compensation aforesaid or incurred for costs or expenses in connection with any claim as aforesaid and the contractor agrees that the decision of the Museum/Centre as to the amount payable by the contractor under the provisions of the clause shall be final and conclusive.

20. The Contractor shall also strictly comply with all the provisions of Contract Labour (Regulation and Abolition) Act 1970 and the contract labour (Regulation and Abolition) Central rules 1971 in respect of this contract.

21. Every effort should be made to complete the work by the successful Tenderer within the specified time schedule. In case the successful tenderer fails to comply with Clause No. 3 i.e., the specified time schedule as per the finalized and accepted terms and conditions the Centre shall have the rights to either impose Penalty Clause or cancel the order forfeiting the EMD. The decision of the Centre in this regard shall be final and binding on the successful Tenderer.

22. The successful Tenderer shall submit necessary trade and other licenses as may be required to carry on the tendered job and shall also be responsible for compliance at his/her own cost of all rules and regulations, enforced from time to time by the appropriate authorities.

23. The successful Tenderer shall not under any circumstances whatsoever transfer wholly or partly the contract/agreement/Purchase Order to any other person(s)/firm/company or assign the agreement or benefits of this agreement to any other party for any reason whatsoever. Otherwise the order/ agreement will automatically stand cancelled.

24. The authorities of NSC Delhi do not bind themselves to accept the lowest tender and reserves the right to accept or reject any or all tenders wholly or partially without assigning any reason whatsoever.

25. The authorities of the Centre, reserve the right to amend, alter or modify the terms and conditions mentioned above, if necessary, from time to time.

26. Income Tax and Work Contract Tax shall be deducted at source, if applicable, from each bill/claim of firm as per prevailing Government rules.

27. Incomplete offers, i.e. offers received without prescribed “General Terms & Conditions” & Technical Specifications” shall be rejected straightway without reference to the tenderer.

28. The agency must have valid GST/TIN/WCT/PAN number and attach documentary proof with the Tender. Bidders are requested to enclose a copy of their valid certificate of PAN/ TAN/GST or any other document as requested by the Centre with their tender.

29. The agency shall take care of all statutory obligations as are required under the Contract Labour Regulation Act, etc.

30. The agencies participating in the tender and bidding, may obtain on specific request, details about the outcome of the tender and other related details, if any.

31. National Science Centre will not be liable for any injury or death of an employee who is deployed by the successful bidder within/outside the work site during the time of execution of the work order.

32. All disputes and differences between the successful tenderer and the Centre of any kind, except quality of workmanship and materials, whatever arising out of or in connection with the order on carrying out of the work (whether during the progress of the work or after their completion and whether before or after the determination, abandonment or breach of the terms and conditions of the order) shall be referred to the sole arbitration of a person nominated by the Director General, National Council of Science Museums, whose decision in this regard will be final and binding on both the parties – the successful Tenderer and the Centre.

The provisions of the Arbitration and Conciliation Act 1996 or any statutory modification or re-enactment thereof and of the rules made there under for the time being in force shall apply to arbitration’s proceedings under this Clause.

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NATIONAL SCIENCE CENTRE  
(National Council of Science Museums)  
Bhairon Road, Near Gate No.2, Pragati Maidan,  
New Delhi - 110 001

**DECLARATION-I**

This is to certify that I/We have no close relative as an employee of the National Council of Science Museums (close relatives means: Father, Mother, Brother, Sister, Son, Daughter and Spouse) nor any such close relatives are associated with us as proprietor/partner/share holder/ director and like.

Signature of the tenderer

Address :

Official seal with date

**DECLARATION-II**

We, do hereby accept the General Terms and Conditions as provided by the National Science Centre, Delhi along with tender documents for Design, Supply, Installation, Testing, Commissioning & Post Warranty Annual Maintenance of Active 3D Projectors based setup at Virtual Experiential Museum, Varanasi (Uttar Pradesh), and also undertake to execute the job strictly as per the specifications of NSC, Delhi as provided along with the tender documents. National Science Centre, Delhi shall be at liberty to cancel the order in full or in part and forfeit the Earnest Money Deposit or Security Deposit retained with them in the event of failure of any of the declaration made by us.

Signature of the tenderer / Constituted Attorney

(With date and Official Seal)

**Scope of work, Technical Specification and Bill of Quantity**

**A. Scope of Work:**

This is a tender for Design, Development, Supply, Installation, Integration, Testing and Commissioning of “**ACTIVE 3D PROJECTORS BASED SETUP**” at Virtual Experiential Museum, Man Mandir, Varanasi. The scope of work includes supply, installation, integration, testing, commissioning and training of all the equipment along with the especially developed software (content) with onsite warranty support and maintenance.

1. A rectangular hall with dimensions as per drawing in Annexure- D-1 shall be used for the show. Necessary visitors’ viewing arrangement will be done by the centre. The entire work related to creating the desired Active 3D projector based show includes supply of equipment (such as projectors, media servers/ Computer Server, sound systems, show control system (if required), accessories, cables, software and content) and the allied works such as placement and installation of equipment, integrating the entire equipment as well as creation of content as per the storyline are in the scope of the work.
2. The projection should be designed within the available area as per drawing in Annexure-D-1 and there is no scope for any alteration of floor, ceiling, wall etc. of the hall. The site is an ASI protected monument where the alteration in the building is not possible and any installation is required to be done with utmost sensitivity and care, without damaging the interior of the building.
3. Supply and installation of projectors and mapping of projectors on the given area should be done in accordance with the directive of the OEM, for best results. This shall be in the scope of work.
4. Supply and installation of high performance Computer Server supporting Dual Display to playback Active 3D digital content and static imagery shall be in the scope of work. The vendor shall provide a user friendly Graphical User Interface to control entire system, including audio system, etc. from the same interface.
5. Supply and installation of Data cabling to carry lossless video signals from amongst the sources viz. Computer Server and playback system to projectors and high speed data path network (if any) among computing and storage elements through fibre optic cables are also in the scope of the work. Any other cable/connector/adaptor/repeater/audio/video cable etc. if any required shall be in the scope of work
6. Proper dressing up of power and data cabling for all systems and devices so as not to cause interference with video signals and data networks shall be ensured by the successful vendor and shall be in the scope of work.
7. A multi-channel audio system with minimum 2 speakers and 1 subwoofer for about 10 visitors in the viewing area as per the layout of the room supplied in Annexure-D-1, complete with amplifier, mixer and high quality speakers etc. shall be in the scope of work.
8. The agency shall provide site plan document with plan, elevation and mounting details for placement of Projectors, speakers in the visitors’ area, Computer server, audio amplifier, mixer, mic and other allied system.

9. All metallic structures for mounting of projectors, speakers, Computer server etc shall be coated with anti-corrosive treatment and painted such that they are made inconspicuous. All safety measures shall be considered while designing for safety of people and equipment.

10. The detailed specification of all the equipment and content is provided in Annexures D-2 to D-6

#### **B. Warranty:**

All the equipment shall be covered under 3 Years onsite warranty and all software should have lifetime validity.

- i. Preventive maintenance shall be carried out by the agency at regular intervals (quarterly) during the Warranty period and a logbook to this effect shall be maintained at site.
- ii. The Bidders shall also quote for annual charges for post warranty maintenance of the installed facility after 3 Years mandatory warranty period for further period of 2 Years on year to year basis.

#### **C. Technical Presentation:**

The bidders are required to give a presentation for technical evaluation on 12th July 2018 at 3:00 PM at National Science Centre Delhi in which they will present the following:

- i. Technical details of all the hardware and the software that they are planning to use
- ii. How they propose to place the projectors
- iii. What treatment they propose to give to the storyline.

Financial bid of only those bidders will be opened who will qualify the technical presentation. The decision of the committee, duly appointed by Director, NSCD will be final in this regard.



## **Technical Specifications and Bill of Quantity**

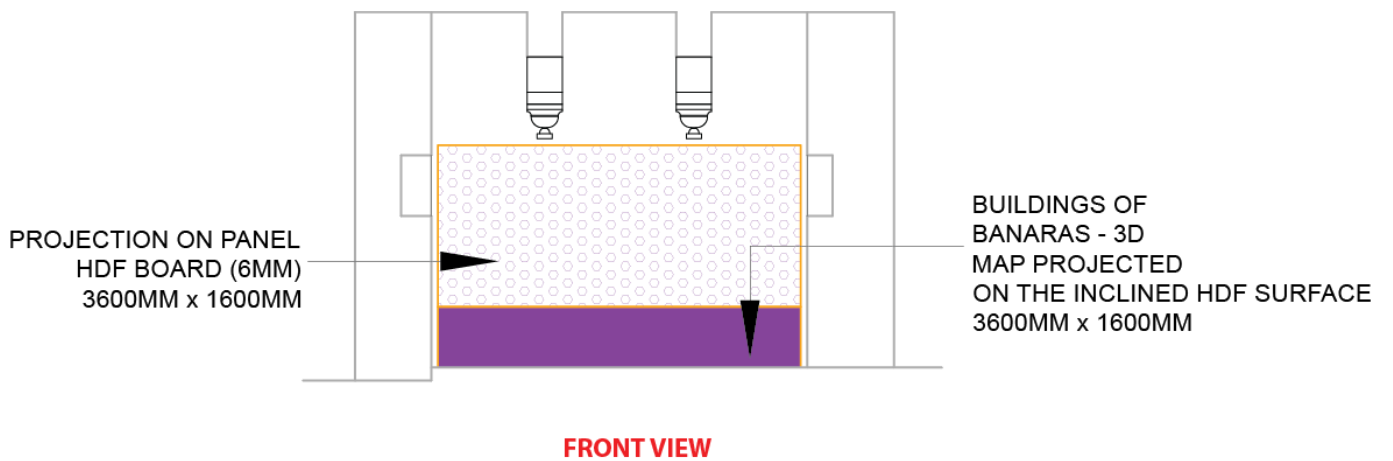
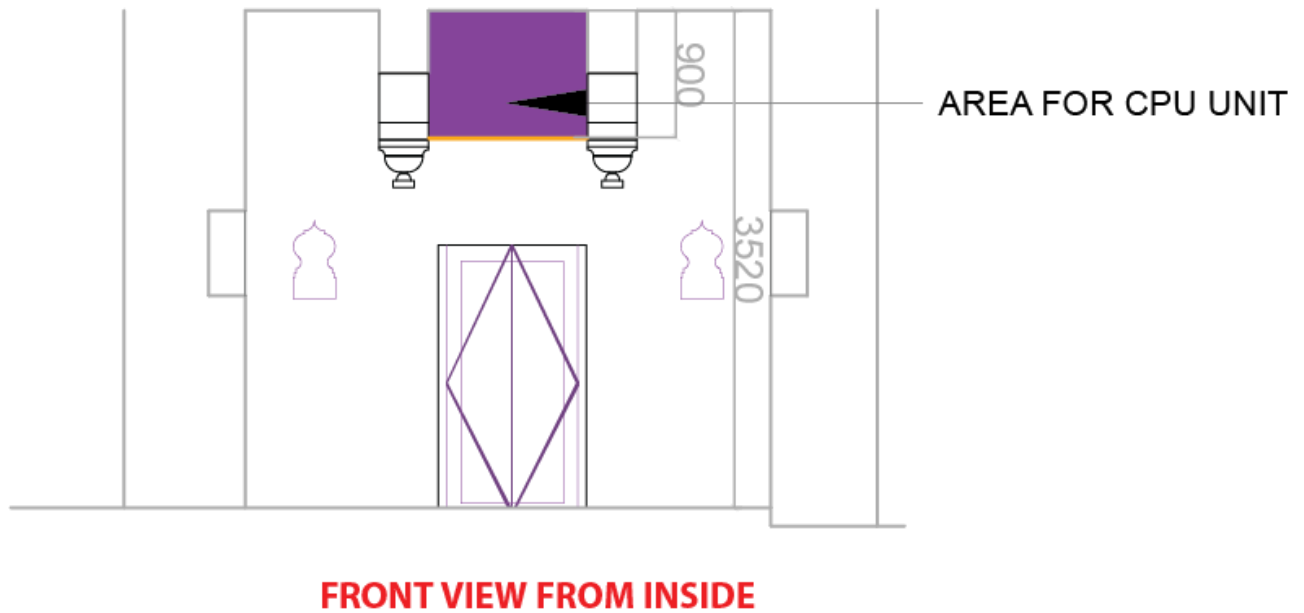
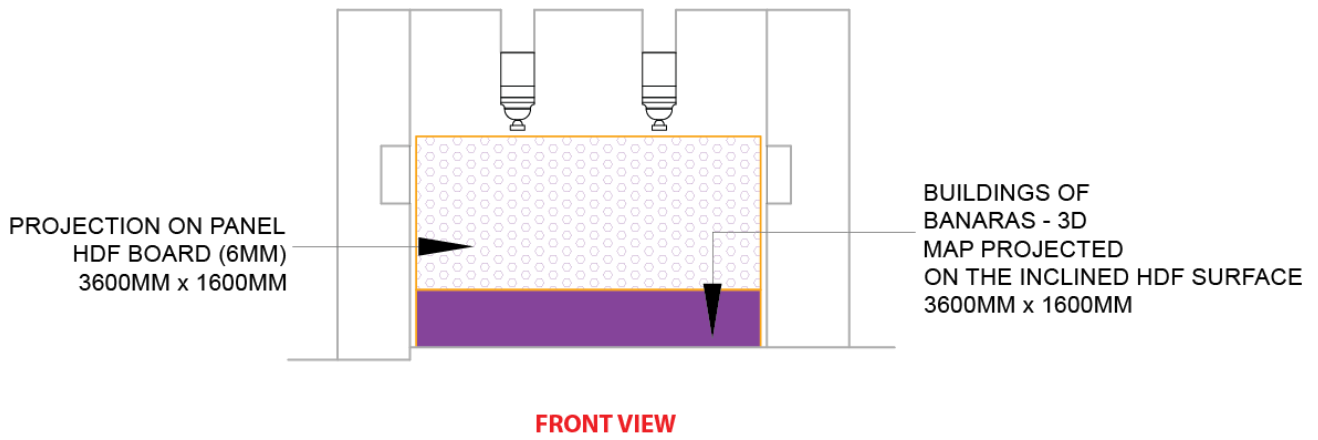
Technical specifications of “Active 3D Projectors based Show”

1. Hardware setup: Fully integrated “Active 3D Projectors based Show” consist of long life DLP Laser phosphor High-Lumen projectors with necessary lenses, and transmitters, Computer System supporting Dual Display with backup, Projection Mapping software/system with respective licensees, HDMI Extender receiver/transmitter, 2.1 Surround Sound System & Speakers, projectors mounting provision (without disturbing the aesthetics of the hall) and cabling for projectors and lighting and other setup etc.

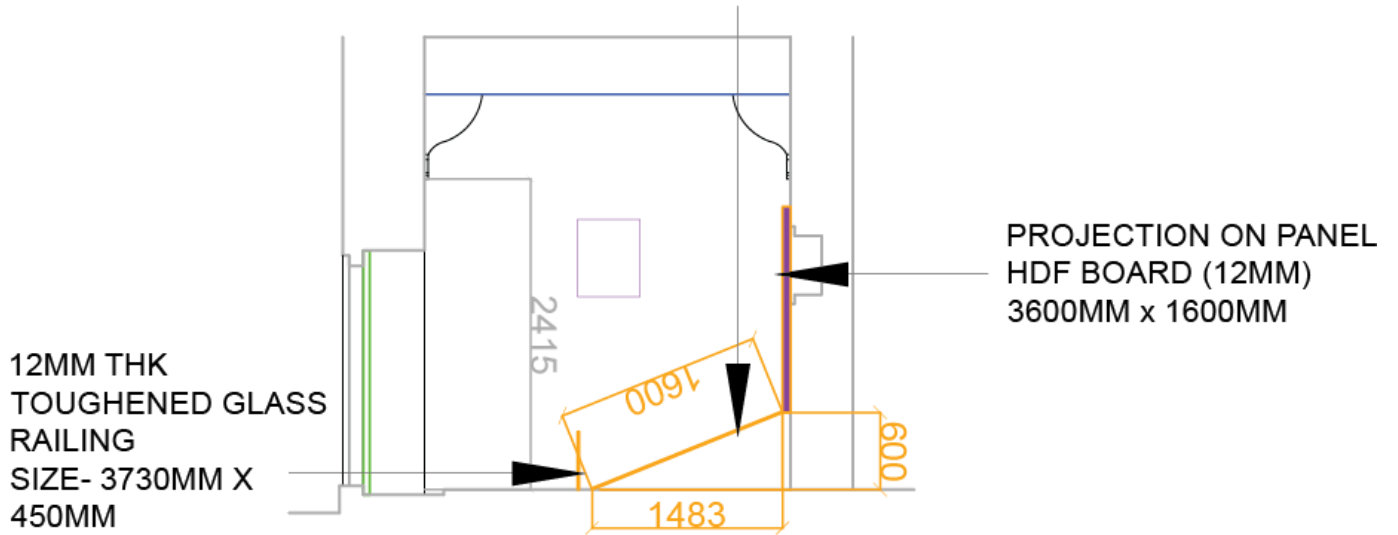
The specifications of the complete hardware system are provided in sections below.

- a. Location: Detailed diagram of room with dimensions attached as Annexure D-1.
- b. Computer System– Detailed specifications attached as Annexure D-2
- c. Projection Mapping Software – Detailed specifications attached as Annexure D-3
- d. Multi-channel surround sound system (2.1) with continuous power – Detailed specifications attached as Annexure D-4
- e. DLP Laser Phosphor Projectors with necessary lenses, transmitters and mounting provision – Detailed specifications attached as Annexure D-5
- f. Content Brief: Details given in Annexure D-6
- g. Active 3D goggles – Compatible with the transmitters of the projectors to receive signals from with the projectors simultaneously.

Reference images of Room

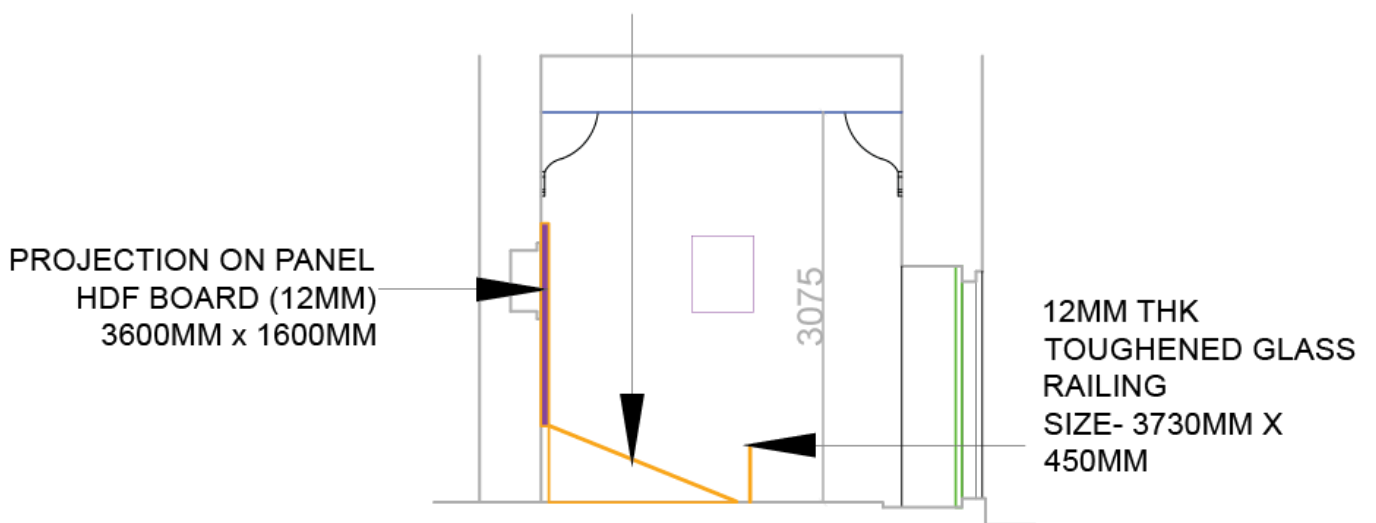


BUILDINGS OF  
BANARAS - 3D  
MAP PROJECTED  
ON INCLINED HDF SURFACE  
3600MM x 1600MM



**LEFT VIEW**

BUILDINGS OF  
BANARAS - 3D  
MAP PROJECTED  
ON INCLINED HDF  
SURFACE  
3600MM x 1600MM



**RIGHT VIEW**

## 1. Computer System specification:

Item	Desired Technical Specifications	Qty.
Computer System with Dual Display Graphic Card	<ul style="list-style-type: none"> <li>• Intel i7 Processor / AMD thread ripper or equivalent</li> <li>• Window 10 pro OS (With lifetime license)</li> <li>• 16 GB RAM or more</li> <li>• Dual Display Graphic card</li> <li>• Graphic Card NVidia NVS 310 (SFF machine interface) or equivalent</li> <li>• Nvidia GPU with minimum 2 outputs supporting 3840x2400@60Hz</li> <li>• 256 GB SSD hard drive Primary &amp; Secondary</li> <li>• Motherboard supporting 1 gpu at x16 or 2 at x8 or 2 gpu at x16 depending on software</li> <li>• WUXGA output on each display out</li> <li>• Images: BMP, JPEG, PNG</li> <li>• Audio: MP2, MP3, AAC, FLAC, OGG, and WAV</li> <li>• Rugged cooling system</li> <li>• Please mention the brand in the quote, else the tender will be rejected</li> <li>• This mapping system needs to be designed to create an integrated 3D show with 2wuxga projectors edge blended together to play software content through two active 3D projectors.</li> <li>• The software content is synchronised</li> <li>• SFF computer cabinet of volume 6-8 kgs.</li> <li>• Warranty: 3 Yrs. Onsite</li> <li>• Make : HP, Dell, Asus, or equivalent approved</li> </ul>	02 Nos.

**2. Projection Mapping Software:**

Item	Desired Technical Specifications	Qty.
Projection Mapping Software	<ul style="list-style-type: none"><li>• Window 10 pro OS compatible</li><li>• Multi-Projector soft edge blending, image warping</li><li>• Real-Time Keystone</li><li>• Synchronised Playback</li><li>• Lifetime software license validity</li></ul>	1 No.

3. Multi-channel surround sound system (2.1): A multi-channel audio system of Creative, Philips, JBL, Bose, Sony, Yamaha, Shure or equivalent reputed brand shall be an integrated part of the overall system.

Specification

<b>Item</b>	<b>Desired Technical Specifications</b>	<b>Qty.</b>
Surround Sound System (2.1)	A special spatial multi-channel audio processor is to be used for controlling and programming of the audio soundscape for this setup. Amplifier/mixer is to be solid state and computer controlled. Audio system shall consist of 2 speakers and 1 subwoofers mounted suitably in the visitors area.	1 Set
	<b>Warranty: 3 YEARS ONSITE (Full equipment)</b>	

## 4. DLP Laser Phosphor Projectors with necessary lenses and mounting provision

Make: Panasonic, Christie, Barco or equivalent approved reputed brand

Specification:

<b>DLP Laser Phosphor Active 3D Projectors with necessary lenses and mounting provision with transmitters</b>	<ul style="list-style-type: none"> <li>Brightness: 10000 Lumens or more</li> <li>Lamp Life: 20,000 hrs.</li> <li>Resolution: WUXGA (1920 x 1200)</li> <li>Throw distance: as per site condition</li> <li>Aspect ratio: 16:9-10</li> <li>Contrast Ratio: 6000:1 or more</li> <li>Display Technology: DLP</li> <li>Lamp Type: High efficiency Laser Phosphor</li> <li>Lens Shift: Horizontal &amp; Vertical</li> <li>Digital Keystone: Horizontal &amp; Vertical</li> <li>Edge Blending: Yes</li> <li>HDMI 1.4, HDBaseT - frame packed, top/bottom, side-by-side</li> <li>Up to 120Hz output</li> </ul> <p><b>3D support features</b></p> <ul style="list-style-type: none"> <li>3D Sync In (BNC) - for genlocking projectors</li> <li>3D Sync Out (BNC) - for genlocking projectors or controlling emitter or polarizer</li> </ul>	One set comprising of 2 Nos. of Active 3D projectors to achieve the required mapping of defined area.
	Active 3D glasses	20 Pair
	<b>Warranty: 3 YEARS ONSITE (Full equipment)</b>	

**6. Content:**

A brief write up for the 3D film of 8-10 minutes content (bilingual) which is under the scope of the party will be uploaded later via “Corrigendum” on E-Tender portal against this tender.



NATIONAL SCIENCE CENTRE  
(National Council of Science Museums)  
Bharion Road, Near Gate No. 2, Pragati Maidan,  
New Delhi-110001

**TENDER No. : NSCD/18011/E-Tender- 16/18-19**  
**TECHNICAL (Techno-Commercial) BID**

Notes: ALL PARTICULARS / INFORMATION SHOULD BE GIVEN IN THE FOLLOWING FORMAT WITH COMPLETE DETAILS.

1. Name & Address of the Firm/Bidder :

2. Telephone Number:

Office :

3.i)Background details of the firm :

(State whether original manufacturer/direct  
Dealer of the manufacturer).

ii) In case of direct dealers, submit copy of valid  
dealership license issued by the manufacturer.

4. State the Name of the Banker including IFSC Code:  
and Account Number of the Tenderer for releasing  
digital mode of payment.

5. Past experience in such business for last 3 years :  
giving details of established clients especially  
Government Offices. Submit satisfactory certificate  
issued by such clients and Government Offices.

6. i) Whether capable to execute the tendered item  
strictly as per enclosed technical specification.  
(Please mention 'YES' or 'NO')

ii) If it is mentioned 'NO' above, submit detailed :  
deviation to be made from the enclosed technical

specification.

(Extra sheet may be attached, if required)

- iii) If it is mentioned 'YES' above submit copies:  
of product brochure (for product categories) as a  
proof of their statement.

7. State the Name & Address of the Manufacturer :  
whose product has been offered /quoted by the tenderer.

8. Proof of financial status of the company/audited Balance :  
Sheet for last 3 years indicating total turnover as well  
(submit documentary evidence.)

9. Whether agreed to accept 30 days' credit Payment Terms. :  
(Please mention 'Yes' or 'NO')

10. Minimum time required to complete the tendered item at :  
Virtual Experiential Museum , Varanasi

11. Mention GST Registration Number and attach :  
Current valid Tax Clearance Certificate.

12. Whether agreed to complete commissioning of the  
tendered items as per enclosed Specification  
(Annexure-D) positively by 30 days and failing  
which ready to absorb heavy penalty, if any order is  
placed on the bidder after observing tender procedure.  
(Please mention 'YES' or 'NO')

I/We hereby declare that the above statements are true. I/We also declare that the decision of National Science Centre, Delhi regarding selection of eligible firms for opening of Financial Bid (Part-II) shall be final and binding on me/us.

Dated

Official Seal

Signature of the Tenderer/Constituted Attorney

**BANK DETAILS OF NATIONAL SCIENCE CENTRE, DELHI**

Name of the Account Holder	NATIONAL SCIENCE CENTRE, DELHI
Account No.	2417101004100
Bank Name	CANARA BANK
Bank Address	6, Bhagwan Das Road, New Delhi
IFSC Code	CNRB0002417
MICR Code	110015045
Type of Account	Saving Account
Branch Code	2417
GST Number	07AAAAN2541C1Z5