



# NATIONAL COUNCIL OF SCIENCE MUSEUMS

(MINISTRY OF CULTURE, GOVT OF INDIA) 33, BLOCK GN, SECTOR V BIDHAN NAGAR KOLKATA – 700091

INVITATION

FOR

**REQUEST FOR PROPOSAL (RFP)** 

for

Conceptualisation, Design, Supply, Installation, Testing and Commissioning of 3D Projection Mapping Multimedia Show including related Civil, Mechanical, Structural, Electrical work and integration with existing Façade Lighting and 3 years of comprehensive maintenance and operation of equipment and show

<u>at</u>

National Gallery of Modern Art (NGMA) New Delhi.

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#### Disclaimer & Disclosures:

Bidders shall be deemed to have full knowledge of the requirements of the work. NGMA/NCSM will not accept any responsibility or liability for any errors, omissions, inaccuracies or errors of judgment with respect to information or materials provided by NGMA/NCSM in this RFP Document or otherwise, with respect to this Project. Although such information and materials are to the best of NCSM's/NGMA's belief, however, their verification is the sole responsibility of Bidder.

NCSM, Kolkata has prepared this document to give background information on the captioned project to the interested bidders/agencies/contractors. While NCSM has taken due care in the preparation of the information contained herein and believe it to be accurate, neither NCSM nor NGMA nor any of its authorities or agencies nor any of their respective officers, employees, agents or advisors give any warranty or make any representations, express or implied as to the completeness or accuracy of the information contained in this document or any information which may be provided in association with it.

The information is not intended to be exhaustive. Interested agencies/contractors are required to make their own inquiries and respondents will be required to confirm in writing that they have done so and they do not rely only on the information provided by NCSM in submitting the Request for Proposal. The information is provided on the basis that it is non-binding on NCSM/NGMA or any of its authorities or agencies or any of their respective officers, employees, agents or advisors.

NCSM/NGMA reserves the right not to proceed with the project or to change the configuration of the Project, to alter the time table reflected in this document or to change the process or procedure to be applied. It also reserves the right to decline to discuss the matter further with any bidder submitting the RFPs.

No contractual obligation on behalf of NCSM, whatsoever, shall arise from this RFP unless & until a formal contract is signed and executed by duly authorized officers of NCSM and the bidder in due course after the invitation of tenders. NCSM may modify any / all of the terms of this RFP process giving due notification through the NCSM's website (www.ncsm.gov.in).

NCSM will not be liable for any costs incurred by the Bidders in the preparation of the RFP & its presentation. The preparation of Bidder's proposal will be made without obligation by NCSM to acquire any of the items included in the Bidder's product, or to select any Bidder's proposal, or to discuss the reasons why a particular Bidder's proposal is accepted or rejected. All information included by the bidders in their proposal will be treated in strict confidence.

# National Council of Science Museums, Kolkata Request for Proposal (RFP) Tender No: I-18012/7/20(234)

Name of the work: Conceptualisation, Design, Supply, Installation, Testing and Commissioning of 3D Projection Mapping Multimedia Show including related Civil, Mechanical, Structural, Electrical work and integration with existing Façade Lighting and 3 years of comprehensive maintenance and operation of equipment and show at National Gallery of Modern Art (NGMA), New Delhi.

All bids must conform to the guidelines set out in the RFP Document.

On-line Digitally signed e-tenders (RFP) under QCBS (Quality and Cost Based Selection) method are invited in Two Bid System from competent Company/Firm/Agency/Consortium, who satisfy the eligibility criteria enumerated in the Tender Documents (RFP), and having experience of similar nature ofwork of Conceptualisation, Design, Supply, Installation, Testing and Commissioning of 3D Projection Mapping Multimedia Show including related Civil, Mechanical, Structural, Electrical work and integration with existing Façade Lighting and 3 years of comprehensive maintenance and operation of equipment and show at National Gallery of Modern Art, New Delhi. Interested Agencies may download the tender documents from the Central Public Procurement Portal (CPPP): <a href="http://eprocure.gov.in/eprocure/app">http://eprocure.gov.in/eprocure/app</a> or from the Council's website <a href="http://www.ncsm.gov.in">www.ncsm.gov.in</a> as per the following schedule:-

#### SCHEDULE:

1	Bid Document Published Date	February19, 2021	03.00 p.m.
2	Bid Document Download Start Date	February 19, 2021	03.00 p.m.
3	Bid Document Download End Date	March 07, 2021	12.00 noon
4	Pre-Bid Clarification Start Date	February 19, 2021	04.00 p.m.
5	Last date of submission of Pre-Bid Queries or clarifications	February 26, 2021, 16:00 hrs IST only at the following email id: <u>k.unni@ncsm.gov.in</u> . The bidder who will submit the pre-bid clarification through email shall get the intimation from NCSM to attend the pre-bid online. Bidders interested to attend the meeting online should send their email address.	
6	Pre Bid Clarification End Date	February 26, 2021	04.00 p.m.
7	Pre-Bid meeting Date	March 03, 2021	03:30 p.m.
8	Bid Submission Start Date	February 20, 2021	06.00 p.m.
9	Bid Submission End Date	March 08, 2021	12.00 noon
10	Technical (Techno-Commercial) Bid Opening Date	March 09, 2021	12.00 noon
11	Date Place of Technical Presentation	To be notified later	
12	Financial Bid Opening Date	To be notified later	

Tender document can be downloaded from the Central Public Procurement Portal (CPPP) website "http:// eprocure.gov.in"

- 1. Visit of the NGMA, New Delhi Campus: Bidders are advised to visit the National Gallery of Modern Art at New Delhi premises and ascertain the nature and quantum of work before tendering. Lack of knowledge of site conditions cannot be considered as an excuse for mistake/misrepresentation in the bid.
- 2. Submission of the Bid: This Tender is an e-Tender and bids are to be submitted through CPP Portal (http://eprocure.gov.in) only. Bids submitted in physical forms will be summarily rejected.
- 3. Details of submission of tender, etc. are indicated in the RFP/tender document.
- 4. The online bid, both Technical (Techno-Commercial) Bid and Financial bid, duly furnished in Cover –I and Cover-II respectively, should be uploaded by the due date and time as per the above schedule. The responsibility to ensure the same lies with the bidders.
- 5. NCSM reserves the right to amend/withdraw any of the terms and conditions in the RFP Documents or to reject any or all RFPs without giving any notice or assigning any reason. NCSM also reserves the right to accept or reject any or all tenders in full or part without assigning any reason whatsoever. NCSM shall also not be bound to accept merely the lowest tender but the technical suitability, capability and superiority of the concept/ technology interface/system etc. shall be of prime consideration for selection of the appropriate set of concept/ technology interface /system collectively considered as a complete solution.

(Dy. Controller of Stores & Purchase) National Council of Science Museums Kolkata

Date: 19.02.2021

The due date for submission of RFP is 12:00 hrs. on March 08, 2021.

This document is the property of National Council of Science Museums (NCSM), Kolkata. It may not be copied, distributed or recorded on any medium, electronic or otherwise, without NCSM's written permission thereof, except for the purpose of responding to NCSM for the said purpose. The use of the contents of this document, even by the authorized personnel/agencies for any purpose other than the purpose specified herein, is strictly prohibited and shall amount to copyright violation and thus, shall be punishable under the Indian Law.

#### **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: <u>https://eprocure.gov.in/eprocure/app</u> Manual bids shall not be accepted.
- **3.** The instructions given in **"Instruction for Online Bid Submission**" should be strictly followed during submission of the Bid.
- **4.** Bid documents may be scanned at 100 dpi with a black and white option which helps in reducing the size of the scanned document.
- 5. The validity of Bids: The Bids should remain valid for 90 days from the date of opening of the financial bid.
- 6. Rejection of Bids: Canvassing by the Bidder(s) in any form, unsolicited letter and post-tender correction may invoke summarily rejection of their bid(s). Conditional tenders will also be rejected. Non-compliance of applicable General Information and Instructions will disqualify the Bid.
- 7. The Bidders should have a Digital Signature Certificate (DSC) for filling up the Bids. The person signing the tender documents should be authorized for submitting the online e-tender.
- 8. The Bidders shall fill up the Prescribed Format for submission of Technical (Techno-commercial) Bid as per "Annexure-B" format duly signed by the authorized signatory. The person signing the tender document should be authorised for submitting the online e-tender.
- 9. TheFinancial Bid shall be filled in and signed by the authorized signatory online as per format"Annexure-C" available at Central Public Procurement Portal e-tender system website <a href="http://eprocure.gov.in/eprocure/app">http://eprocure.gov.in/eprocure/app</a>. Offline Financial Bid shall not be accepted.
- **10.** Tender must be uploaded in two separate covers marked **Cover-1** (Technical Bid) and **Cover-2** (Financial Bid/BOQ and Cost breakup). The contents of Cover-1 and Cover-2 shall be as follows:-

### Cover-1

- i) "Technical (Techno-Commercial) Bid" (as per **Annexure-B** format) duly filled in and digitally signed with an official stamp.
- ii) All relevant documents related to "Technical (Techno-commercial) Bid" as per "Annexure-B".
- iii) The Technical Brochures of each equipment with technical explanation for every feature of the product offered by the bidders.
- iv) The scanned copy of "Scope of Work, Bill of Quantities, Terms & Conditions etc. (Annexure-A) duly signed by the Authorized Signatory with the official stamp as a token of acceptance of the same by the bidders.

#### Cover-2

- i) The "Financial Bid (BOQ)" (as per Detailed Scope of Work and Bill of Quantities) i.e. Schedule of Price Bid in the item-wise tabular format duly filled in and digitally signed.
- ii) "Cost Break-up" for each quoted component (as per Detailed Scope of Work and Bill of Quantities) duly filled in tabular format and digitally signed with an official stamp.

The Cover-1, i.e. Technical (Techno-commercial) Bid shall be opened by NCSM at the first instance and evaluated by the competent authority. At the second stage, the Cover-2 containing Financial Bid of only techno-commercially acceptable offers shall be opened for further evaluation and ranking before awarding the contract.

### 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 submit 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

### A. REGISTRATION

- i. Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: <u>https://eprocure.gov.in/eprocure/app</u>) by clicking on the link "**Online Bidders Enrolment**" on the CPP Portal which is free of charge.
- ii. As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- iii. 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.
- iv. 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.
- v. 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.
- vi. 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.

### **B. SEARCHING FOR TENDER DOCUMENTS**

- i. 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.
- ii. 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.
- iii. 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.

### C. PREPARATION OF BIDS

- 1. Bidders should take into account the original e-NIT/RFP and any subsequent corrigendum published on the tender document before submitting their bids.
- 2. Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents including the

names and content of each of the documents that need to be submitted. Any deviations from these may lead to rejection of the bid.

- 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 a black and white option which helps in reducing the 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 the "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 the bid submission process.

#### D. SUBMISSION OF BIDS

- i. Bidders should log-into 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.
- ii. The bidders have to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- iii. 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 (ratequotesheet for Façade Lighting), open it and complete the blue coloured (unprotected) cells with their respective financial quotes and other details (such as the 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.

In addition to the above, the **Cost Break-up** shall be submitted in tabular format duly digitally signed with an official stamp.

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

- vi. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- vii. 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.
- viii. 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.

### E. ASSISTANCE TO BIDDERS

- i. Any enquiries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority.
- ii. 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.
- iii. All communications related to tender including the submission of Proposal should be addressed to :

Dy. Controller of Store and Purchase National Council of Science Museums 33, Block GN, Sector – V, Salt Lake, BidhanNagar, Kolkata – 700091

## NATIONAL COUNCIL OF SCIENCE MUSEUMS SECTOR-V, BLOCK-GN, BIDHANNAGAR, KOLKATA – 700 091.

#### TENDER No. I-18012/7/20(234)

Name of the work: Conceptualisation, Design, Supply, Installation, Testing and Commissioning of 3D Projection Mapping Multimedia Show including related Civil, Mechanical, Structural & Electrical work at National Gallery of Modern Art (NGMA), New Delhi.

#### 1. INTRODUCTION

National Council of Science Museums, Ministry of Culture, Government of India invites offers/bids from reputed and experienced agencies in the field of dynamic artistic architectural façade lighting design and setting up of high-quality light fittings and fixtures at museum/Art Galleries/exhibition/public space, especially in the field public/private museums for undertaking the work of as per the tender at National Gallery of Modern Art, Jaipur House, New Delhi.

#### i. Brief Information of National Gallery of Modern Art:

Inaugurated during the first decade of the Independence of India, the National Gallery of Modern Art opened in March 1954. The choice of Jaipur House, one of the premier edifices of Lutyens' Delhi, signified the envisaged high profile of the institution. Designed by architect Charles G Blomfield, as a residence for the Maharaja of Jaipur, the butterfly-shaped building with a central dome was built in 1936. It was styled after a concept of the Central Hexagon visualised by Sir Edwin Lutyens. Along with buildings designed for other princely potentates like Bikaner and Hyderabad, Jaipur House girded the India Gate circle. NGMA is the premier institution of its kind in India. On January 19th 2009, the NGMA, New Delhi inaugurated its new wing. It is run and administered as a subordinate office to the Department of Culture, Government of India. The NGMA has two branches one at Mumbai and the other at Bengaluru. NGMA with 17,000 works (approximately) is a repository of the cultural ethos of the country and showcases the most significant changing art forms through the passage of the last hundred and fifty years starting from 1857 in the field of Visual arts. Today NGMA is visited by over 225.000 people every year.

#### ii. Brief about the Project:

The National Gallery of Modern Art is a landmark tourist venue in New Delhi. It occupies a prominent spot on the C-Hexagon of the India Gate arena. Housing creations of prominent artists like Tagore, Amrita Shergil, Nandalal Bose and many more, NGMA puts itself as an indispensable identity of the capital city in the contemporary art field.

The grand and beautiful Jaipur House facade is a brilliant example of gothic revival architectural style, and evening light and sound show on its facade will enhance its appeal to the visitors, who can enjoy the narrative and abstract delightful shows, depicting the history of Jaipur house and relish the important exhibits of NGMA, showcased in the traditional and contemporary experimental Son-et-Lumiere shows. With this objective, NGMA intends to put up a 3D Projection Mapping show

along with Laser light projection, interactive programmable lights with DMX controllers and sound system at Jaipur House.

### iii. Guideline for Storyline, Concept and Theme:

- On the main Facade (Rear Side) of Jaipur House: A dramatized history of the Jaipur House, its royal connection and grandeur have to be told briefly. Brief about the butterfly design European neo-classical mixed with Indian and Art Décor style, Saucer-shaped dome, decorated with patterns, chattris and jharokhas can be narrated. In addition, the story of the house of Jaipur and the people and events associated with the Jaipur house will become part of the brief narrative, along with the brilliance of the architecture eventually restored and its conversion into a public space with the NGMA galleries begun a new chapter in its glorious past.
- On the main Facade (Rear Side) of Jaipur House: The second and the major part of the story celebrates the NGMA, its contribution to the modern and experimental art in India, and pioneering efforts to bring the artists in the fore. The showcase also creates a greater connection between the artist and art with the visitors, thereby bringing the art closer to the common people.
- On the Facade of the New Building: The third part of the story will be a play out on the facade of the new wing, where a brilliant musical light show will be created on a custom-created music track, which takes people through an auditory experience of moving through time, old musical influences to the contemporary sounds. The programmed light and laser show will create a visual delight and will be experienced by the visitors while they can move freely around the show space.
- The story will be built on a dramatic soundtrack, and the visuals will be created to justify the projection facade. The narrative could use any of the following methods:
  - Documentary style narrative with 3D
  - A fictional story with characters that live out the ECR narrative. VFX led treatment with 3D
  - Fully animated story with elements of fiction to weave the story together.

# IMPORTANT: The final content of the entire show will, however, be finalized in close consultation with the authorities of NGMA/NCSM.

- iv. NCSM, therefore, invites Request for Proposal from Company/Firm/Agency/Consortium etc. with adequate experience, sound financial background and proven capabilities for Conceptualisation, Design, Supply, Installation, Testing and Commissioning of 3D Projection Mapping Multimedia Show including related Civil, Mechanical, Structural & Electrical work at NGMA, New Delhi.
- v. Bidders who are interested to participate should meet the eligibility criteria and submit their duly completed RFPs along with all the required documents in support of their eligibility qualification.
- vi. If at any stage, it comes to the notice of NCSM that any successful/qualified bidder had misrepresented the facts/falsely claimed any qualification while submitting his RFP or at any time subsequently, the agency will be disqualified. And in any such instance, NCSM also reserves the right to take any further action against such bidder under law.

### 2. ELIGIBILITY CRITERIA:

i. The bidder could be an Individual, Limited Company/Corporation, Proprietary Firm, Partnership etc. Consortium or Joint Venture are allowed to bid for the work.

- ii. Company/Firm/Agency/Consortium shall have the experience of implementing outdoor 3D projection mapping Multimedia show projects OR Company/Firm/Agency/Consortium having experience in the installation of hardware equipment in the 3D Projection Mapping Multimedia Show on Monument or Notified Buildings / Museums etc.
- iii. General Eligibility:
  - Valid GST, EPF and ESI Registration of the participating firm/lead firm
  - Valid PAN card and Agency must have filed IT returns for the last three years
  - Valid electrical License of the /firm/lead firm
  - Bidder can be a registered company/Partnership Firm/Proprietorship Firm/LLP/Consortium etc.

<u>Documents required:</u> Bidders should submit the copy of GST, EPF and ESI registration, copy of PAN card, copy of the electrical license and a copy of company registration. In the case of Consortium/JV, a copy of the agreement is also required to be submitted.

- iv. Bidder Existence Eligibility: The bidding agency (the lead partner in case of consortium/JV) should be in existence for at least 5 years as on the date of publication of this RFP. <u>Documents required</u>: For establishing the existence of the agency which is participating in the bid, the bidder should submit a copy/copies of the work order(s) issued on the name of the agency (of the lead partner in case of consortium/JV) as well as copies of work completion certificate of the same work.
- v. **Turnover Eligibility:** The Average Annual Turnover of the Bidder (of the lead partner in case of consortium/JV) for the last three financial years (2017-18, 2018-19, and 2019-20) should be minimum INR 5.00 Crore.

<u>Documents Required:</u> Turnover of the bidder (of the lead partner in case of consortium/JV) and the duly certified document from CA clearly indicating the Turnover of the last three financial years (2017-18, 2018-19, 2019-20) as per Annexure - F

vi. **Work Experience Eligibility:** The Bidder should have completed the similar works during the last 5 years from the date of the issue of this RFP as per the details given below.

One similar work of value not less than **Rs. 3.80 Crore** of the estimated cost of work.

Or

Two similar works each of value not less than **Rs. 2.40 Crore** of the estimated cost of work.

Or

Three similar works each of value not less than **Rs. 1.90 Crore** of the estimated cost of work.

### Notes:

• Here the **similar works** shall mean concept, design, supply, installation, testing & commissioning of Permanent sound & light / Multimedia projection mapping show (3D projection

mapping based sound & light show /Live Action & 2D-3D content based permanent Multimedia projection mapping shows)

- In the case of Consortium/JV participating in this RFP, the works of all the individual members of the Consortium/JV done independently will be considered as valid work experience.
- If any bidder has executed the similar work as a part of a consortium/JV in the past then the work experience of the bidder shall be considered as valid only if all the consortium/JV partners are participating together in the present RFP also.
- The details of qualifying works/projects shall be furnished as per the proforma in Annexure-D and if required, the bidder shall also facilitate inspection of the above qualifying project(s) by NCSM's officials to ascertain the performance of the system.
- <u>Documents Required:</u> The bidder should submit a copy/copies of the work order(s) issued in the name of the agency as well as copies of work completion certificate of the same work, clearly indicating the value of the work of similar nature. If the work order contains several works, only the value of the works of a similar nature shall be considered for work experience. If the value of the works of similar nature is not specifically mentioned in the cost breakup, the work experience against that work order will not be considered as valid.
- The evaluation shall be done as per the marking scheme given in clause 7(D)
- vii. NCSM may inspect any of those works at its discretion to verify the credentials of the bidder for the qualifying works/ projects indicated above for which the Bidder shall provide references (including Referee names and contact details) in respect of the projects implemented.

# The bidder should provide documentary proof to clearly substantiate each eligibility criteria, failing which the bid will be summarily rejected.

- viii. Even though the bidders meet the above qualifying criteria, they are subject to be disqualified if they have:
  - Made misleading or false representation in the forms, statements and attachments submitted in proof of the qualification requirements; and/or
  - Record for poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc.

### ix. Proof of Concept (PoC)

- A. The bidders shall be advised to present a proof of concept (PoC) i.e. scheme for 3D Projection Mapping Multimedia Show for the building using mapping and edge blending software with unlimited video layers in compatiblesoftwares, having Lifetime software license validity. The details of the building shall be shared with the applicants on request.
- B. The light fittings if required to be used with the installation should be energy efficient (as far as possible) and the colour of the light shall be controllable using an external/internal controller.
- C. Further requirement if any regarding the presentation shall be communicated in due course.

### Note:

• The bidder shall approach NCSM for required drawings.

- The bidders should be ready for the demonstration of Proof of Concept (PoC) on short notice, say 3 days from the communication from NCSM.
- Bidders should submit the PDF file of the PoCalong with the technical bid.

#### 3. SCOPE OF CONTRACT

The successful bidder shall carry out and complete the works in every respect in accordance with this contract and in accordance with the directions of the designated officers and to the satisfaction of the NCSM/NGMA. The designated officers may from time to time issue further drawings and/or written instructions, detailed directions and explanations in regard to:

- (a) The variation or modification of the design, quality or quantity of works for the addition or omissions or substitution of any work.
- (b) Any discrepancy in the drawings or between the schedule of quantities and/or drawing and/or specifications.
- (c) The removal from the site of any material brought therein by the successful e-tenderer and the substitution of any other materials therefrom.
- (d) The removal and/or re-execution of any works executed by the successful bidder.
- (e) The dismissal from the works of any persons employed thereupon.
- (f) The opening up for the inspection of any work covered up.
- (g) The amending and making good of any defects.
- (h) The successful bidder shall comply with and duly execute any work comprising such instructions, detailed directions and explanations, provided always that if the Engineer's instructions involved variations from the priced Schedule of Quantities, such instructions shall be issued by the Council and the successful e-tenderer shall take appropriate action.
- (i) Even if not specifically mentioned in the schedule of quantities, the successful bidder shall be deemed to have allowed necessary material, labour, tools and plants etc. required for satisfactory completion of the items of work as indicated in drawings and description given in the specifications, which are attached herewith unless the item specifies labour only or otherwise.
- (j) Rates quoted also apply for work in patches, strips, small or large areas, and for different shapes and in different sizes and in different planes (Horizontal/vertical or inclined).

### (k) SUCCESSFUL BIDDER TO PROVIDE EVERYTHING NECESSARY

The successful bidder shall provide everything necessary for the proper execution of the works according to the true intent and meaning of the design, drawings and specifications and bill of quantities taken together, whether the same may or may not be particularly shown on the drawings or described in the specifications or included in the bill of quantities, provided that the same is to be reasonably inferred therefrom and if he finds any discrepancy in the drawings, or between the drawings and specifications and bill of quantities, he shall immediately refer the

same to the Engineer who shall decide which shall be followed. Figured dimensions shall be followed in reference to scale.

#### (I) RATES

The rates quoted by the Successful bidder shall be paid at net rates. He should include in his rates allowance for increase or decrease in the prices due to market fluctuation. He shall not be entitled to any separate amount on account of GST, other taxes, LabourCess, duties etc. which are in force or will be enforced or enhanced by Government or local bodies during the contract period or after e-tendering. Accepted e-tender rates shall not be changed due to changes in wages of labour either.

The rates considered in the respective items are inclusive of comprehensive maintenance of the entire system for a period of two years after completion of the defects liability period of 1 year post the actual satisfactory completion of the entire work in all sense. (Total comprehensive maintenance period of 3 years including Defect Liability period of 1 year)

#### (m) QUANTITIES

All the quantities given in the schedule of quantities are provisional and indicative. Bidders may prior to submitting their proposals, examine the requirements at their own expense and obtain and ascertain for themselves, at their own responsibility and other information necessary for preparing their Proposals.

The e-tenderers shall be deemed to have given Balanced Rates and quantities for each item with make model and specification. Also irrespective of variation in quantities to any extent the e-tenderer shall be paid at accepted contract rates only. **NCSM reserves the right to increase or decrease quantities to any extent.** 

#### 4. SCOPE OF WORK

The 3D show will be in bilingual and the duration of the show will be 25 - 30 mins. The 3D projection show will be created on the Main façade (Rear Side) of Jaipur House. The show will be divided into two parts. The two building facades (Jaipur House and New Building) facing each other will serve as the primary and the secondary shows, engaging people for over 25 - 30 mins with the modern as well as traditional show look and feel. The project is to be completed within **two months'** time from the date of issuance of the work order.

a. Primary Show (on Jaipur House Façade): The Jaipur House façade will be the main show with 25 - 30 minutes duration supported with interactive lights over the trees, side pillars, art works (sculptures, bass reliefs, etc) and side facades of the building. Many of the lights are already placed in the facade through dynamic facade lighting which needs to be integrated with the show. There will be seats in front of the Jaipur House façade which will be removable and will be replaced on a daily basis. The seats are placed as and when required by the NGMA. Alternately, the seating may be finalized as mutually agreed during finalization of concept and design. Approximate Projection Area (in mts.) 15(H) X 18(W) inclusive of dome structure.

- b. Secondary Show (on New Building Façade): A laser show will be a contemporary show with programmable lights only fitted on the secondary façade and the pillars on the sides. Programmable laser will attempt to create images over the façade making a contemporary new media show that will make an ambience to passer-by for the main 3D show. This will be a non-captive show and usually aim to build a synthetic environment for the visitors. It can be supported with instrumental music synchronized with the show. Approximate Projection Area (in mts.)10 (H) X 34(W)
- c. The bidder is required to carry out the above project on turnkey basis for proper integration and operation of the complete system including related civil, structural, Mechanical, Structural and electrical works
- d. The following activities are proposed:
  - i. Creative conceptualisation of the projection, laser and light based multilingual show, both narrative and non-narrative based.
  - ii. Design of Projection and light layout plan, schematics and technical drawings.
  - iii. Provision to integrate the existing facade illumination lights on the show controller to utilize those in the show as well.
  - iv. Suggest value addition to the light and sound show to enhance visitor experience.
  - v. Supply, installation, testing and commissioning of the projection, laser and programmable light equipment, media servers, consoles, cables and connectors etc. as per BoQ
  - vi. Research, script and visualisation of the show including mapping content. All contents must be approved by NGMA
  - vii. Create a 25-30 min projection show including the light programming for the adjoining facade as part of the show, create programming of laser and the musical show which includes conceptualization of the artistic production, art direction, sound design, projection methodology etc.
  - viii. Preparing the audio track with editing & mixing, speaker addressing, and transfer of sound tracks to digital playback format.
  - ix. System integration and on-site programming of the lighting schemes.
  - x. Design of show control system, its integration & cabling.
  - xi. Integration of the show with the existing Facade Lights
  - xii. Operation and comprehensive maintenance of the site and regular show running for 3 years which may be extended for 2 more years
  - xiii. Training and documentation
  - xiv. Ancillary Related work to be carried out by the agency:
    - Related props installation for required technologies.
    - Supply through UPS for power protection to hi-end sensitive products
    - All other project design base items.
    - Electric power connection, distribution, lighting and cabling etc.

- 100 nos. of Foldable or ergonomically light-weight seats must be provided by the agency which can be placed and displaced for the primary show.
- Civil, Structural, Mechanical, & Electrical Works related 3D Projection Mapping will be responsibility of the agency
- Control Room, Feeder Box, laying and cabling of LT wires and mounting should be done by the agency.
- All related approvals

### 5. <u>RETENTION MONEY/SECURITY DEPOSIT:</u>

- i. This shall mean and be 3% of the total cost of work awarded or the final gross value of work done & paid against this contract, whichever is greater.
- ii. The Retention Money or Security Deposit will be deducted & retained @3% of the value of work done &paid through every interim bill.
- iii. The Retention Money or Security Deposit so retained shall not carry any interest thereon.
- iv. 50% of the Retention Money or Security Deposit shall be refundable to the successful bidder after satisfactory completion of the Defects Liability Period post actual successful completion of the work in all respect & handing over as detailed under TERMS OF PAYMENT.
- v. Balance 50% of the Retention Money or Security Deposit shall be refundable after satisfactory completion of the Comprehensive Annual Maintenance Contract with NGMA for a period of 2 years post the Defects Liability Period of 1 year as detailed under TERMS OF PAYMENT.
- vi. In case of cancellation of the contract, this retention money shall be forfeited and the amount necessary to make up this amount shall be recovered from any money due to the successful bidder under this or any other contract with NCSM.
- vii. In case, the successful bidder causes any damage to the property of the Client, the NCSM shall have discretionary rights to execute the repair of damages and recover the amount from the successful bidder or to adjust the equivalent amount from the successful bidder's Security Deposit. Please keep in mind that Jaipur House is a historic and Grade II Heritage Structure.
- viii. In case of death of successful bidder, Security Deposit shall be returned /refunded to the legal heir of the successful bidder after adjustment of dues, if any, post the actual completion of the work & upon expiry of the specified guarantee/defects liability period as well as satisfactory completion of CAMC period of two years post the Defect Liability Period.

#### 6. JOINT VENTURES/CONSORTIUM

- i. In the event that the successful bidder is a consortium/joint venture formed, lead partner/prime contractor in whose name the bid was issued, shall be fully and solely responsible for the performance of contract and all works designed and executed under the contract.
- ii. Bids submitted by a consortium or joint venture of maximum two firms including lead partner, all partners shall comply with the following requirements:
  - a. The consortium as a whole must be a sound entity technically and the lead partner must be a sound entity financially.
  - b. The Consortium as a whole must satisfy the qualification criteria set forth herein. The turnover of the lead partner must satisfy the eligibility criteria of the tender. The bid shall contain a statement of the members of the consortium and shall provide all information necessary to satisfy Client/Employer that the Consortium fulfils the qualifying criteria.
  - c. The Bids shall contain original copy of the Memorandum of Understanding (MOU) on Rs.100. Non-Judicial Stamp paper (or as applicable) between the consortium members clearly identifying the lead partner, scope and responsibility and financial part of each member in the performance of the contract.
  - d. The consortium members will obtain approval of the Client for any change in the shareholding structure and scope of work or any other terms of MOU.
  - e. The lead partner of the consortium shall be nominated as being in-charge to represent the Consortium in all dealings with the Client/Employer and for providing any information or clarification sought from the Consortium.
  - f. The Bid shall be signed by all the consortium firms by their authorized person. The lead partner shall be authorized to incur liabilities and receive instructions for and on behalf of any and all member(s) of the Consortium and all dealings including billing and payments, shall be done exclusively with the leader of the consortium.
  - g. Only firms or joint ventures that have been qualified under this procedure will be eligible to bid for this project.
  - h. All members of the Consortium shall be liable for the execution of the project in accordance with the terms of the MOA and Contract agreement.
  - i. Any individual bidder or member of a consortium cannot be a member in another consortium and participate in this tender.
  - j. All correspondence or communications will be done by the Lead partner (or authorized representative of Lead partner) of the consortium.

- k. Net worth as on the last day of the preceding financial year should be positive during the preceding three consecutive financial years.
- I. Bidder submitting their bid shall not be under liquidation, court receivership or similar proceeding.

#### Notes:

- 1. Technical bids of the agencies that fulfil the above pre-qualification criteria shall be opened.
- 2. The bidder has to upload the compliance letter on its letterhead duly signed by the authorized signature & other supporting documents as asked for in the bid in scanned format. Failing to submit the same or non-compliance/deviation from any bid terms and conditions, eligibility criteria or technical specifications may result in rejection of the bid.

#### 7. PROPOSAL EVALUATION / SELECTION CRITERIA

A three-stage procedure under Quality Cum Cost Based (QCBS) Evaluation will be adopted in evaluating the proposals

- i. Eligibility Criteria Evaluation: Any shortcoming of the documents will lead to rejection of the bid and other envelopes will not be opened.
- ii. Thematic/Technical Presentation Evaluation: The agencies qualifying on the basis of their credentials evaluation will only be called for Thematic /Technical Presentations which can be at a very short notice of even three days.
- iii. Financial Evaluation: Only the bidders/firms securing the minimum qualifying marks based on Eligibility Criteria Evaluation and Technical/Presentation Evaluation as described in details below will be eligible for their Financial Bid Opening & Financial Evaluation.

#### A. Technical Evaluation

- i. The Evaluation Committee appointed by the competent authority shall carry out its evaluation applying the evaluation criteria specified in the bid document. Evaluation of the application would be done as per the documents submitted. Bidders/agencies who are in the trade and are fulfilling the eligibility criteria as per the documents required would only be called for thematic presentation which can be at a very short notice of even three days.
- ii. Further, during the technical presentation the evaluation would be carried out on Quality and Cost Based Selection (QCBS) basis where the Technical cum creative evaluation would be given upto 100 marks.
- iii. Each responsive proposal shall be attributed a technical score. On the basis of the technical assessment, agencies securing minimum 70 marks out of 100 will be shortlisted and the financial bids of only the shortlisted agencies will be opened. The date and time of opening of the financial bids will be intimated to the selected /shortlisted agencies through CPP portal.

#### B. Financial Evaluation

#### **Quality and Cost Based Selection (QCBS)**

# Under the Quality and Cost Based Selection (QCBS) basis, the **weightage to Technical and Financial Bids would be 70% and 30% respectively.**

i. **Technical Bid**: The total marks obtained out of 100 marks in technical evaluation shall be scaled down to a maximum of 70 as follows which shall henceforth be the total marks obtained by the bidder against the technical bid.

Marks (max 70) on technical evaluation (A) =  $0.70 \times Marks$  of Technical Bid evaluation.

#### ii. Financial Bid:

- a. The Financial Bids of the technically qualified bidders will be opened online through CPP Portal.
- b. The lowest financial bid would be the best financial bid and shall be awarded 30 marks. Other financial bidders would be awarded marks out of a maximum of 30 based on the following formula:
- c. Marks (Max 30) on Financial Bid (B) =0.30 X (Lowest Financial Bid) x 100 ÷ Financial Bid under Evaluation.
- d. Only fixed price financial bids indicating total price for all the work/services specified in this bid document will be considered.
- e. Details of the taxes and duties leviable on the basic cost of the development of the museum to be indicated clearly in the financial bid.
- f. Errors & Rectification: Arithmetical errors will be rectified on the following basis: "If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected. If there is a discrepancy between words and figures, the amount in words will prevail".

### C. Combined Evaluation of Technical & Financial Bids

- a. The technical and financial scores secured by each bidder will be added using weightage of 70% and 30% respectively to compute a Composite Bid Score.
- b. The bidder securing the highest Composite Bid Score will be declared as the Best Value Bidder for award of the Project.
- c. In the event the bid composite bid scores are "tied", the bidder securing the highest technical score will be declared as the Best Value Bidder for award of the Project.

### Note:

Technical Bids will be evaluated on the basis of documents as detailed above & presentations to be made by the eligible agencies before the Constituted Committee. The date and time of the presentations will be conveyed to the eligible agencies.

### D. Technical cum Creative Evaluation Marking Scheme

The Technical Bids will be evaluated on the basis of the indicated parameters in the table below:

Evaluation of bids found eligible as per eligibility criteria would be undertaken by the Tech	nical
Evaluation Committee Constituted by the competent authority as per parameters cited below.	

SI. No.	Parameter	Criteria	Max. Marks 100	Qualifying Marks, wherever applicable
1.	Credentials of applicant/agency (Total Max. marks- 10)	5 Years - 7 Marks More than 5 years upto 10 years - Bonus 2 Marks More than 10 years –Bonus 3 Marks	10	07
2.	Team (Experience and credentials will be taken into account. Provide a single page Biodata highlighting their past work experience) (Total Max. marks- 15)	Director – 4 Marks Script Writer – 3 Marks Graphic design/computer animation designer – 3 Marks Subject Expert –3 Marks Electrical Engineer - 2	15	NA
3.	Financial Soundness (average annual turnover [of Lead Partner in case of consortium] during the last three years (2019- 20, 2018-19, 2017-18) (Total Max.Marks-15)	<ul> <li>i. For average annual turnover above Rs. 5.00 Crore -10 marks</li> <li>ii. For average turnover in excess of Rs. 5.00 Crore @ 1 marks per Rs. 1.00 Crore each</li> <li>Maximum Marks - 15 marks</li> </ul>	15	10
4.	Similar Work Experience (Total Max.Marks-15)	<ul> <li>For one similar completed works having value         ≥ Rs. 3.80 Crore - 10 marks     </li> <li>For two similar completed works having value         ≥ Rs 2.40 Cr &lt;3.80 Cr – 7 marks </li> <li>For three similar completed works having value         ≥ Rs 1.90 Cr &lt; 2.40 Cr – 5 marks </li> <li>Maximum Marks - 15 marks</li> </ul>	15	NA

5.	Operation and Maintenance experience for 3D projection show, sound & Light Shows. (Total Max.Marks-05)	<ul> <li>Minimum 2 projects - 3 Marks 05</li> <li>1 mark for each additional project</li> <li>Maximum Marks - 05 Marks</li> </ul>	NA
6.	Technical presentation before the Technical Evaluation Committee (Total Max Marks- 40)	<ul> <li>a. Thematic &amp; Conceptual presentation with animation capsule for NGMA facades of minimum 2 minutes - 15 Marks</li> <li>b. Treatment of Storyline - 10 Marks</li> <li>c. Technology adopted / quality of equipment - 05 Marks</li> <li>d. Look &amp; feel of proposed concept - 05 Marks</li> <li>e. Samples of earlier similar work - 05 Marks</li> </ul>	NA

The bidder will have to enclose a presentation on the concept note along with the technical proposal to NCSM. The presentation shall cover the comprehensive details, approach & methodology, Organization structure, Work program, Implementation strategy, offered equipment list, Technical brochures and specification sheet, timeline etc.

### 8. COMPLETION TIME

The project/work is to be completed within **2 Months** from the date of issuance of the work order/LOI.

# 9. DEFECT LIABILITY PERIOD, OPERATION and COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT

- i. **Defect Liability Period (DLP) shall be of ONE YEAR** from the date of actual satisfactory completion & handing over of the entire job as certified by the authorities of NCSM/NGMA.
- ii. The Comprehensive Annual Maintenance Contract (CAMC) will be of TWO YEARS and will commence from the date of satisfactory completion of the Defect Liability Period.
- iii. During the Defect Liability Period and the Comprehensive Annual Maintenance Contract Period, the successful bidder within their quoted rates shall operate, service & maintain the entire Projection Mapping system installation with all its control units & other accessories, rectify any or all the observe defects or any or all the defects as pointed out to them within a reasonable time, as decided by the competent authority of NCSM/NGMA.

- iv. During the DLP as well as the CAMCP, the successful bidder shall also perform the operation of the entire show as per the timings decided and finalised by NGMA authorities. The frequency and the timing of the show may be changed by the authorities of NGMA as and when required.
- v. Apart from the routine preventive maintenance, whenever the successful bidder is called for providing any kind of repairs/maintenance, they shall render all such services within a reasonable time, any number of times within the quoted rates and at no extra cost or expenses whether during the DLP or the CAMCP.
- vi. A register of such visits during DLP & CAMCP as well as a log-book of services rendered/ major works done shall be maintained wherein counter signatures of the authorised NCSM/NGMA representative shall be obtained from time to time.
- vii. A penalty in the form of deduction as deemed fit by NCSM/NGMA authority shall be applied and be deductible from the Retention Money / Security Deposit of the bidder for any lapse in providing services, rectifying defects or in case of an inordinate delay in attending the faults/defects or responding to the service/breakdown calls and lapse in operations.
- viii. If the successful bidder fails to rectify the defects within a reasonable time, such defects will be rectified by NCSM/NGMA by engaging departmental staff or outside Agencies at their discretion, and the cost thereof, as decided by NCSM will be deducted from the Retention Money / Security Deposit of the successful bidder retained by NCSM.
- ix. The bidder may separately prepare & upload a detailed scope of CAMC with other terms & conditions on their letter head which will be mutually modifiable with the successful bidder during the execution of the work and the DLP.

#### 10. TERMS OF PAYMENT

Total Contract Payment shall be on progressive basis as per the breakup in the following table:

SI. No.	On Achieving of Milestone	Payment admissible		
1	On supply of equipment	50% of the value of the equipment based on the challan/proof of value submitted		
2	On completion of total work as per BOQ	Balance amount of the tender		
3	After completion of 1 year Defect Liability Period and successful operation	Refund of 50% of Security Deposit		
4	After completion of 2 years of CAMC and successful operation	Refund of balance 50% of Security Deposit		

In case if the work is carried out in phases, total payment admissible will be computed on a pro-rata basis based on completed percent of work vis-à-vis total work under consideration.

All payments, as above, shall become payable within fifteen days of submission of the respective invoices. The payment shall be transferred to the bank account of the successful bidder through electronic transfer only, for which the bank details of the bidder has to be provided with each invoice.

Statutory deductions/recoveries viz. TDS, TDS GST, LabourCess, etc. shall be made as per the relevant provisions from the payment due to the bidder from time to time.

NGMA/NCSM reserves the right to foreclose the agreement at any stage by giving one-month notice, in case the performance is not yielding results. In that case no further payment shall be paid one month notice to the Agency for the remaining stages of the work and no claim of this account will be entertained.

#### **11. OTHER TERMS AND CONDITIONS**

- i. The successful Bidder shall submit within 3 (three) days from the date of placement of the work order the duplicate copy of the work order duly signed with official stamp on all the pages as a token of their acceptance of the work order/Lol.
- ii. In case the successful bidder refuses to accept the offer after finalisation or does not comply with sending of acceptance of the order within 03 (three) days from the date of placement of the order as per the finalised and accepted terms & conditions, the order shall be cancelled forthwith.

#### iii. Penalty Clause :

In case of non-completion of the entire work within the stipulated time, and the delay is not attributable to site requirements, Liquidated Damage (L.D.) @1% per week of the total cost of work awarded subject to a maximum of 10% of the gross value of work done or cost of work awarded, whichever is greater, shall be recovered from the bill of the successful bidder.

- iv. The authorities of NCSM 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.
- v. The quoted rate shall remain unchanged during the entire contract period.
- vi. The successful bidder shall be liable for depositing all taxes, levies, cess, etc. on account of service rendered by it to concerned tax collection authorities from the time to time as per extant rules and regulations on the matter.
- vii. The successful bidder shall maintain all statutory registers under the applicable laws. The bidder shall produce the same, on demand, to the concerned authority of this Office or any other authority under Law.

- viii. The Tax Deduction at Source (TDS) shall be effected, as and when applicable, as per the provisions of Income Tax Act, as amended from time to time and a certificate to this effect shall be provided to the bidder/contractor/supplier by this Office.
- ix. In case, the successful bidder fails to comply with any statutory/ taxation liability under appropriate law and as a result thereof this Office is put to any loss/ obligation, monetary or otherwise, this office (National Council of Science Museums, Kolkata) will be entitled to get itself reimbursed out of the outstanding bills or the Security Deposit of the Agency, to the extent of the loss or obligation in monetary terms.
- x. Before submitting the offer, bidders may visit the National Gallery of Modern Art, New Delhi at their own cost and risk, to get an idea of actual building structure, façade area, surroundings ambiance, site understanding, etc. which may help in designing an immersive 3D Projection show & quantum of work.
- xi. Bidders should provide the details of their local office, service centres in Delhi/NCR for after sales service and maintenance of the entire system.
- xii. The successful bidder shall be required to depute a team of qualified and experienced personnel to coordinate, execute and supervise all the activities from commencement till completion and handing over the system. This team of personnel will also be required to monitor the progress and review in consultation with NCSM & NGMA officials on a regular basis.
- xiii. Bidders should provide an escalation matrix of their company for this project. Names of all the persons, contact details along with their designation should be submitted.
- xiv. Bidders should submit the details of the major projects which they have done in the last Five Years.
- xv. Notwithstanding anything contained herein above, in case of any dispute, claim and/or legal action arising out of this contract, the same shall be subject to the jurisdiction of courts at Kolkata only.
- xvi. **Arbitration Clause**: All disputes and differences between the successful tenderer and the Council of any kind, except quality of workmanship and materials, whatever arising out of or in connection with the order on the 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 successful Tenderer and the Council.

The provisions of the Arbitration and Reconciliation Act 1996 or any statutory modification of the rules made there under for the time being in force shall apply to arbitration's proceedings under this Clause.

## 12. INDICATIVE BOQ WITH TECHNICAL SPECIFICATION / BILL OF QUANTITIES

A. (	CONTENT DETAILS		
1	Script writing of 90 minutes for 3D projection Show in English and Hindi containing the theme as mentioned above	1	Lot
2	Detailed Research on the NGMA Art works and Artists involved to the overall understanding to write a relevant script is paramount to conceptulise creatively	1	Lot
3	Creative Direction: Designing and drafting of visual storyboard, storytelling, testing and finalization of script, animation, graphics, video-timeline with frames, voiceover and music.	1	Lot
4	Creative Production: Integration of all projections with 3d modelling if any. Integration of video content with the Building wall.	1	Lot
5	Shooting and recreation of scene : Any shooting or recreation shot required to create content for projection	1	Lot
6	Music composition and direction, Conceptualization and finalization of music design for VO, recordist for music or musician for flute, sitar, table, dholak, santoor, sarod etc, foley sounds. Background sound. Archival sound editing etc.	1	Lot
7	Narration to be done by professionals in dual languages (Hindi and English).	1	Lot
B. H	IARDWARE DETAILS		ļ
i	. Projectors, Lasers & Lights		
1	Supply, Installation, Testing and Commissioning of RGB laser Projector 3-chip DLP, 4K (4096X2160) native solution, min. 25,000 ANSI lumens Contrast Ratio : minimum 5000 : 1 , 25000 hours, horizontal and vertical lens offset , Should have inbuilt blending and warping capabilities, Inputs: HDMI/DVI,DP ports Analog Controls: RS232 in/out, Ethernet (10/100), with lens as per site. (Make: Christie/Barco/NEC or equivalent approved by NCSM).	(for front facade)	Nos
2	Supply, installation, testing and commissioning of 13,000 ANSI Lumens or more Laser phosphor Projector on DLP technology having Lux level above 100 lux, Contrast ratio 2,000,000:1, Resolution WUXGA (1920 x 1200), including digital zoom lens as per requirement of site (Make: Christie/Barco/Panasonic /Digital Projection/NEC or equivalent approved by NCSM).	front	Nos

3	Dust tight and protected against waterProjection housing enclosure to control with DEC Control Interface for setup and monitoring of temperature, humidity and status indicators. Power control circuit with PID Management system compatible with the projection housing unit and display unit. (Make : Customised)		Nos
4	Supply, installation, testing and commissioning of 10,000 mW or more Laser, Graphics capable - 35 kpps@° ILDA, Max scan angle 50°, Full colour mixing - analog modulation, 5.5 mm beam diameter and low divergence of 1.3 mrad. Make LPS/KVANT/ Laserworld/Pangolin or equivalent approved by NCSM.	(for	Nos
5	Dust tight and protected against waterLaser housing enclosure with DEC Control Interface for setup and monitoring of temperature, humidity and status indicatorLaser protection housing 20 - 30 °C with an accuracy of 0.3°C inside, independent from the ambient temperature in a temperature range of +5°C up to 45°C (Make : Customised)		Nos
6	Control panel with Independent Digital Led Display for Monitoring of Temperature and Humidity, exhaust control circuit, heating circuit, and power distribution for the projectors and Lasers. (Make : Customised)		Nos
7	Supply, installation, testing and Commissioning of Sharp beam moving heads; Input Voltage: AC 100-240V C 50/60 HZ; Power: 620 Watt, Lamp: 20R 4400Watt; Life:2000 hrs; DMX channels: 24ch; CMY colour mixing with gradually fading colour wheels: 15 colour + white CMY colour mixing system; PAN: 540° (16 bit); Tilt: 270° (16 bit); Gobo wheel: Fixed Gobos + Rotating Gobos; Effect wheel: rotating prism + frost + shake; Strobe: 0-13f/s random or pulse flash, speed adjustable strobe macro function; Dimmer: 0-100% linear lighting dimming; BIS, LM 79 and LM 80 approved; Ingress Protection type: IP20; (Make: Sholite/DTS/Clay Paky/SGM or equivalent approved by NCSM )	(20 for back facade and 6 for front	
8	Supply, installation, testing and Commissioning of Gobo lights; Input Voltage: AC 100-240V C 50/60 HZ; Power: 620 Watt, Lamp: 20R 4400Watt; Life:2000 hrs; DMX channels: 24ch; CMY colour mixing with gradually fading colour wheels: 15 colour + white CMY colour mixing system; PAN: 540° (16 bit); Tilt: 270° (16 bit); Gobo wheel: Fixed Gobos + Rotating Gobos; Effect wheel: facet rotating prism + frost + shake; Strobe: 0-13f/s random or pulse flash, speed adjustable strobe macro function; Dimmer: 0-100% linear lighting dimming; BIS, LM 79 and LM 80 approved; Ingress Protection type: IP20; (Make: Sholite/DTS/Clay Paky/SGM or equivalent approved by NCSM )	(for trees)	Nos
9	Supply, installation, testing and commissioning of DMX 512 controlled Waterproof Clear Vision Dome enclosures for Moving head/Gobo Light.	28	Nos

10	SITC of RGB LED spotlight/uplighter; With Mounting Bracket, pivots in two axes; With 8 LED operation life: > 50,000 hrs.; Colour temperature range: 2700K to 3000K; Input voltage Range: 160V to 260V; LED make: Philips / Osram / Nichia / Bridge lux / Citizen / Cree / Seoul / Samsung or equivalent approved by NCSM; Working Temperature: 0°C to 50°C; Beam Angle: 8° to 12° or Narrow beam; Good Thermal Management System with LM 79 approved; Connection via insulation displacement termination, With DMX Control Gear; Corrosion-resistant aluminum cast housing, High weather resistant/powder-coated, stove-enameled; Safety-glass pane, clear; Ingress Protection type: IP65; (Make: MSS/Sholite/DTS/Clay Paky/SGM or equivalent approved by NCSM)	k	los
11	Supply, installation, testing and Commissioning of RGBW LED Flood light; With 15 Mounting Bracket, pivots in two axes; With LED operation life: > 50,000 hrs; Colour temperature range: 3000K to 6500K; Input voltage Range: 160V to 260V; LED make: Philips / Osram / Nichia / Bridgelux / Citizen / Cree / Seoul / Samsung or equivalent approved by NCSM; Working Temperature: 0°C to 50°C; Beam Angle: 10° to 15°/30°/45°/60° or Normal distribution beam; Power: 70W; RGBW; Colour Rendering Index (CRI): Ra>70; Good Thermal Management System with LM 79 approved; Connection via insulation displacement termination, With DMX Control Gear; Corrosion-resistant aluminum die cast housing, High weather resistant/powder-coated, stove-enameled; Safety-glass pane, clear; Ingress Protection type: IP65; (Make: MSS/Sholite/DTS/Clay Paky or equivalent approved by NCSM )	k	los
12	Supply, installation, testing and Commissioning of RGBW LED Façade light; With 15 Mounting Bracket, pivots in two axes; With LED operation life: > 50,000 hrs; Colour (for temperature range: 3000K to 6500K; Input voltage Range: 160V to 260V; LED make: Philips / Osram / Nichia / Bridgelux / Citizen / Cree / Seoul / Samsung or equivalent approved by NCSM; Working Temperature: 5°C to 50°C; Beam Angle: 40° to 60° or Wide beam; Power factor: >0.9; Working Humidity: 10% to 90% RH; Power: 120W; System power efficiency: >85%; Luminous Efficiency/ LED Efficiency: 4200-4500 lumens; Colour Rendering Index (CRI): Ra>70; Good Thermal Management System with LM 79 approved; Connection via insulation displacement termination, With DMX Control Gear; Corrosion-resistant aluminum die cast housing, High weather resistant/powder-coated, stove-enameled; Safety-glass pane, clear; Ingress Protection type: IP65; (Make: MSS/Sholite/DTS/Clay Paky/SGM or equivalent approved by NCSM)	k	los
ii.	Sound & Music		
13	Supply, installation, testing and commissioning of Audio/Dimmer Rack - 19 " - 36 U 2 Rack, 600 mm wide, height approx 1800 mm with Aluminum frame and 800 mm depth, top bottom side panel and rear door of CRCA. Sheet size 1 mm, front door with Aluminum section and acrylic/glass sheets, make Netrack/APW President/MTS or equivalent approved by NCSM	N	los

14	Supply, Installation, testing and commissioning of Three way full range loudspeaker system (indoor / outdoor). Speaker with 15" woofer, a 10" midrange with 4" voice coil and a 1.4" exit titanium compression driver. The system to be driven in bi-amped mode, Max SPL 136 dB, 900 Watts AES (LF) + 400 Watt AES (MF/HF); Frequency Response (-10dB) : 50 Hz to 20kHz ;Frequency Response (-3dB) : 65 Hz to 20kHz; Sensitivity (DB, 1W @ 1M) : 109 dB, 1W @ 1m; Nominal Impedance (OHM): 8 ohm; Horizontal coverage angle: 60°, Vertical coverage angle: 40°. Protection Grade : IP 67 Make : Bose/Tannoy/QSC/TW Audio / JBL/ RCF or equivalent approved by NCSM	Nos
15	Supply, Installation, testing and commissioning of a subwoofer with 18" woofer, 4.0" voice coil, and The system should be compact and provide high output. 136 dB Max SPL; System Power rating 900 Watt RMS; Frequency Response (-10DB): 30 Hz ÷ 200 Hz, Frequency Response (-3dB): 35 Hz ÷ 200 Hz, Nominal Impedance (OHM): 8 ohm; Sensitivity (DB, 1W @ 1M): 100 dB, 1W @ 1m. Protection Grade : IP 55 Make : Bose/Harman/Tannoy/QSC/TW Audio/ RCF or equivalent approved by NCSM	Nos
16	Supply, Installation, testing and commissioning of Studio Monitor speakers with high power and low distortion 75 W + 25W Two Class-D True Active low distortion amplifiers, Frequency Response : 50 Hz to 20 kHz ; Input sensitivity : -2 dBu; Max SPL @ 1M : 107dB ; Coverage angle 70 degree vertical, 110 degree horizontal ; Total Power : 200W Peak, 100W RMS. Make : Bose/Tannoy/QSC/TW Audio/Harman / RCF Ayra Pro 5 or equivalent approved by NCSM	Nos
17	Supply, Installation, testing and commissioning of 4 channel power amplifier. Lightweight 2 rack units space of Frequency Response (-3DB): 20 Hz ÷ 25 kHz; Power Output Per Channel (@ 2 OHM): 2400W RMS; Power Output Per Channel (@ 8 OHM): 1300 W RMS Power Output (Bridged @ 8 OHM): 4400 W RMS ; Signal to noise ratio 110 dB; Front panel signal / clippings / protection/ temperature LEDs indicators for each channel. Make : Crown / Lab Gruppen /Bose/TW Audio / RCF or equivalent approved by NCSM	Nos
18	Supply, Installation, testing and commissioning of 12 inputs and 8 outputs, configurable signal processing and a high bandwidth, fault tolerant digital audio bus Processor with BLU Link, Signal Processing (MHz) : 400; This processor features a low latency, fault tolerant digital audio bus of 48 channels . Analog Inputs provide software configurable gain in 6dB steps up to +48dB per channel and software selectable Phantom Power per channel. Make : BIAMP/ KlarkTeknik /Bose/TW Audio/ BSS BLU 100 or equivalent approved by NCSM	Nos

19	Audio Interface Hybrid FireWire and USB Audio Interface with software license. Eight 24-bit analog quarter-inch (TRS) inputs and Eight 24-bit analog quarter-inch (TRS) outputs, Operates on all analog I/O at standard sample rates up to 192 kHz, MIDI I/O,Auto-switching international power supply. (Make: Focusrite/Steinberg/Motu or equivalent approved by NCSM)	Nos
iii.	Control Systems	
20	Supply, installation, testing and commissioning of Show Control software complete with necessary software and hardware interface including lifetime license and accessories. Make: Dataton/ Coolux (Christie)/D3 /Medialon/AV Stumpfl/Resolume/Watchout or equivalent approved by NCSM). Artnet boxes with adequate support equipment as required. (make: Enttec, Elation, SGM or equivalent approved by NCSM)	Nos.
21	Supply, installation, testing and commissioning of Laser and lighting Control software complete with necessary software and hardware interface, license as required, Make: Showcad/ Pangolin/ Avolite/ GrandMA/ Realizzer or equivalent approved by NCSM with lifetime license validity.	Nos
22	Supply, installation, testing and commissioning of 4.3.3 Media server with Intel i7 Xeon Processor / AMD thread ripper or equivalent windows / AMD thread ripper or equivalent , Windows (With lifetime license) with 16GB RAM or more Nvidia GPU with minimum 4 outputs supporting 7680x4320@60Hz Full HD output on each display out 23/24 " Flat Panel LED Monitor with HDMI or equivalent display port Industrial grade components from high end brands complete with keyboard mouse etc. for Laser, Lighting, Main server and slave server, Make: Dataton/Asus/HP/Dell or equivalent approved by NCSM. <b>Slave server should be deployed to prevent failure.</b>	Nos
23	Supply, installation, testing and commissioning of Hardware - HDMI Extender receiver and transmitter, Network switch, show control system, iPad/android tablet, WIFI router, FB4 boxes	Set
24	Supply, installation, testing and Commissioning of rack mounted DMX 512 Splitter with Input voltage range:190-280V; Input signal interface: XLR male and female sockets parallel; Output signal interface; XLR female socket parallel; Input Power range: 90V- 240 VAC; Frequency range: 50HZ to 60HZ etc. (Make: MSS/Sholite/DTS/Clay Paky/SGM or equivalent approved by NCSM)	Nos
iv.	Miscellaneous	
25	Supply, installation, testing and commissioning of 40 KVA, on-line UPS with all safeties and protection and suitable capacity sealed maintenance free batteries, with 30 minutes. Backup time on full load with MS open MS Battery rack and Nyvin cable as required, Make: Liebert Emerson/Microtek/Eaton/APC or equivalent approved by NCSM.	Nos

26	Supply, installation, testing and commissioning of DVI Extender Transmitter and Receiver, Make: Kramer/ Extron/ TV One or equivalent approved by NCSM.	3	Set
27	Supply, installation, testing and Commissioning of Rack Mountable 24 Port Gigabit switch, Make: D'Link/Cisco/Netgear/Trendnet or equivalent approved by NCSM.	1	Nos
28	Supply and laying of all necessary power cable and connector of ISI approved reputed brand.	1	Lot
29	Supply and laying of all necessary signal/control cable and connector of ISI approved reputed brand.	1	Lot
30	Supply and laying of all necessary Audio cable and connector of ISI approved reputed brand.	1	Lot
31	Supply and fixing of all Electrical and Signal accessories including Earthing and Electrical panel	1	Lot
32	Supply and fixing of weatherproof projector housing and Central Command centre	1	Lot
33	Supply, Installation, Testing and commissioning of hot dipped galvanized mild steel step Poles (if required). Grey UV stabilized pure polyester powder coated GI pipe. Plasma cut and duly chamfered opening window for terminal connection and mounting accessories. Fitting must be done with Allen screws to the pole.		Lot
34	Preparation of concrete foundation, installation, testing and commission and earthing for poles. RCC laying as per guidelines provided by Engineer-in charge from NGMA.	1	Lot
35	Control of an array (a relevant portion) of existing façade lights of NGMA (will be provided by NGMA/NCSM)	1	Lot
36	Supply, Installation, Testing and Commissioning of Feeder Pillars, LT wires, Casing and housing modules,	1	Lot
37	Chairs and seating arrangements for 100 nos of visitors	1	Lot
C.	ANNUAL MAINTENANCE CONTRACT (After completion of 1 year of defect liability p	eriod)	_
1	In addition of comprehensive maintenance during Defect Liability period of 1 Year, Operation of the show for the entire year ( <b>Compulsory</b> )	1	Lot
2	First year of Operation of the show for the entire year & comprehensive maintenance of the entire facility ( <b>Compulsory</b> ) after the completion of 1 year of Defect Liability Period.	1	Lot

3	Second year of Operation of the show for the entire year and comprehensive maintenance of the entire facility ( <b>Compulsory</b> )	1	Lot
4	Third year of Operation of the show for the entire year and comprehensive maintenance of the entire facility ( <b>Rate only</b> : Will be executed separately by NGMA)	1	Lot
5	Fourth year of Operation of the show for the entire year and comprehensive maintenance of the entire facility ( <b>Rate only</b> : Will be executed separately by NGMA)	1	Lot

Note:

- i. Approval from NCSM must be taken for all the equipment where equivalent makes are being quoted.
- ii. Items where make is not mentioned should at least have BIS mark standards.
- iii. Electrical Distribution system has to be planned considering Power supply available at Site.
- iv. All these quantities may vary as per actual site requirements
- v. All the equipment should be delivered as per scope of work.
- vi. Complete system installation design should be full proof & protective against corrosion, dust, rain water and electric leakage current etc.
- vii. The viewers will sit in front or the projection area of Jaipur House, accordingly the agency shall provide the requisite sound system as per sound condition. Rating should be such that the sound shall be clearly audible to all the people present there at the site.
- viii. The temporary sitting arrangement should be deployed by the successful bidder.
- ix. The control of both shows (Primary and secondary) with lighting, audio and façade lighting should be done from a controlling dashboard.
- x. The show will be arranged between 6 PM to 9 PM or as approved by NGMA. The show may be operated 365 days a year or at the sole discretion of the competent Authority. Bidders must build adequate ruggedness for it to be operated 365 days a year.
- xi. Environment statutory requirements, local govt. department approvals are must and will be obtained by the bidder however the department will extend assistance to seek required approval from various agencies.
- xii. The above mentioned requirements for the show are indicative and bare minimum; however, the agency has liberty to offer the best of industry installation.

#### TENDER NO. I-18012/7/20(234)

Name of the Work: Conceptualisation, Design, Supply, Installation, Testing and Commissioning of 3D Projection Mapping Multimedia Show including related Civil, Mechanical, Structural & Electrical work at National Gallery of Modern Art (NGMA), New Delhi.

#### TECHNICAL (TECHNO-COMMERCIAL) BID

SI. No.	Details	Details	Page Nos.			
		(to be filled by	the bidders)			
General Information						
1.	Name and Full Address of the bidder with Tel. No, E-mail & Fax Number (s) and Contact person					
2.	Name and Address of the lead partner of the consortium to whom the order will be placed. (Applicable only for the Consortium)					
3.	Status of the bidder: - Company / Partnership Firm/ Proprietorship firm/Consortium – Please specify					
4.	In case of Company – please enclose Memorandum and Articles of Association along with certificates of incorporation, if company is a public limited then the certificate for commencement of business also to be enclosed.	Submitted/ Not Submitted				
5.	In case of Partnership Firm – please enclose Certificate of Registration under the Partnership Act, 1932, along with valid partnership deed.	Submitted/ Not Submitted				
6.	In case of Proprietorship or Individual – please enclose a declaration on the letterhead	Submitted/ Not Submitted				
7.	In case of Consortium – please enclose a Memorandum of Understanding (MOU) on Rs.100. Non-Judicial Stamp paper	Submitted/ Not Submitted				
8.	Compliance of statutory laws i) Copy of PAN card ii) Copy of Registration Certificate under GST	Submitted/ Not Submitted				
9.	<ul> <li>i) Copy of ESI registration certificate, if applicable</li> <li>ii) Copy of EPF registration certificate, if applicable</li> <li>In case of non-applicability of EPF and / or ESI, the applicant shall submit a declaration to this effect. In case self-declaration is found to be false at any stage then the contract will be terminated and the firm will be debarred from future tenders for three years.</li> </ul>	Submitted/ Not Submitted				
10.	Copy of valid electrical License of the /firm/lead firm	Submitted/ Not Submitted				
11.	State the Name of the Banker including IFSC Code and Account					

	Number of the Bidder to follow digital mode of payment.	
	Technical Eligibility Criteria	
12.	The bidding agency ( <b>the lead partner in case of</b> <b>consortium/JV</b> ) should be in existence for at least <b>5 years</b> as on the date of publication of this RFP. <u>Documents required</u> : For establishing the existence of the agency which is participating in the bid, the bidder should submit a copy/copies of the work order(s) issued on the name of the agency ( <b>of the lead partner in case of consortium/JV</b> ) as well as copies of work completion certificate of the same work.(Annexure – D)	Submitted/ Not Submitted
13.	The Average Annual Turnover of the Bidder (of the lead partner in case of consortium/JV) for the last three financial years (2017-18, 2018-19, 2019-20) should be minimum INR 5.00 Crore. Documents Required: Turnover of the bidder (of the lead partner in case of consortium/JV) and the duly certified document from CA clearly indicating the Turnover of the last three financial years (2017-18, 2018-19, 2019-20)(Annexure – F)	Submitted/ Not Submitted
14.	<ul> <li>The Bidder should have completed the similar works during the last 5 years from the date of the issue of this RFP as per the details given below.</li> <li>One similar work of value not less than Rs. 3.80 Crore of the estimated cost of work OR Two similar works each of value not less than Rs. 2.40 Crore of the estimated cost of work OR Three similar works each of value not less than Rs. 1.90 Crore of the estimated cost of work.(Annexure-D)</li> </ul>	Submitted/ Not Submitted
15.	Team (Experience and credentials will be taken into account.         Provide a single page Biodata highlighting their past work         experience)         (Annexure E & Annexure E1)         Director         Script Writer         Graphic design/computer animation designer         Subject Expert         Electrical Engineer	Submitted/ Not Submitted
16.	Operation and Maintenance experience for 3D projection show, sound & Light Shows.(Annexure-D)	Submitted/ Not Submitted
17.	Bidders should submit the PDF file of the PoCalong with the technical bid.	Submitted/ Not Submitted
18.	Name and details of the Manufacturer whose components are provided for the project (as per Annexure J)	Submitted/ Not Submitted

19.	Documentary evidence like Work Order, Completion Certificate, Income Tax Return, Audited Report, and Financial Statement, Valid MSME/NSIC Registration Certificate etc. to support. SI no- 12 to 15 above.	Submitted/ Not Submitted	
20.	Declaration of Registration as MSMS (Annexure – L)	Submitted/	
		Not Submitted	
21.	Bid Security Declaration Form (Annexure – M)	Submitted/	
		Not Submitted	

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

Date:

**Official Seal** 

**Constituted Attorney** 

Signature of the Tenderer /

### Note: -

- 1) The Technical bids received shall be evaluated on the basis of eligibility criteria.
- 2) Non submission of any of the documents listed in 'General Information and Technical Eligibility Criteria', mentioned above, shall lead to summarily rejection of the offer. No further correspondence in this regard will be made. However, clarification may be asked on the 'General Information' mentioned above.
- 3) English translation of all such documents which are written in foreign language is required to be submitted.

## TENDER NO. I-18012/7/20(234)

Name of the Work: Conceptualisation, Design, Supply, Installation, Testing and Commissioning of 3D Projection Mapping Multimedia Show including related Civil, Mechanical, Structural & Electrical work at National Gallery of Modern Art (NGMA), New Delhi.

## FINANCIAL BID FORMAT

## Rate NOT to be quoted here. To be quoted ONLY in excel sheet at CPP Portal

Tender Inviting Authority: Director General, National Council of Science Museums, Kolkata.

Name of Work: Conceptualisation, Design, Supply, Installation, Testing and Commissioning of 3D Projection Mapping Multimedia Show including related Civil, Mechanical, Structural & Electrical work at National Gallery of Modern Art (NGMA), New Delhi.

Contract No: Tender No. I-18012/7/20(234)

Name of the Bidder/ Bidding Firm / Company :

## PRICE SCHEDULE

(This is just a <u>format</u> of the actual BOQ template and must not be filled here. The actual BoQ is available in Excel Sheet on CPP portal. Only the relevant columns of the BoQ available at CPP portal should be filled. No other format is acceptable.)

SI.	Item Description		Quantity	Units	Estimated Rate	TOTAL AMOUNT	
No.					in	including Taxes in	
					Rs. P	Rs. P	
1		2	3	4	5	6	
1.01	Conceptualisation	, Design, Supply,	1.00	Job			
	Installation, Testing and Commissioning						
	of 3D Projection Mapping Multimedia						
	Show including re						
	Mechanical, Struct						
	at National Gallery						
Delhi as per Annexure – 'A'.							
Quoted Rate in Figures							
Quoted Rate in Words				•			

Note : A) Bidders are required to quote for all the items mentioned in the Bill of quantities failing which their bids will not be considered and out rightly rejected.

B) Besides this BoQ, the bidders must fill up the cost break up sheet as per Annexure K and upload the same in the CPP Portal as Cover II of the Financial Bid.

C) The total amount with GST of the BoQ and the total amount with GST of cost break up sheet should match.

D) Offline Financial Bid shall not be accepted under any circumstances.

# EXPERIENCE IN SITC FOR 3D PROJECTION MAPPING MULTIMEDIA SHOW ON MONUMENT / NOTIFIED BUILDINGS AND MUSEUM ETC. ON BASIS OF FINALIZATION OF AGREEMENTS EXECUTED DURING THE LAST 5 YEARS SUPPORTED BY MINIMUM THREE CREDENTIALS

S. No Name of Cost of the Name of Phone of Starting Completion Details/ the project Order the Client Contact Date of Date of Scope of Person of Project awarded in Project work INR Client

Agency Experience (Private/PPP/Joint Venture/Consortium Projects)

(Signature of Authorized Signatory)

## Annexure-E

## FORMAT FOR AVAILABILITY OF TECHNICAL TEAM.

The bidder needs to provide the details of key personnel / support staff as proposed by him for the project and deployment on site for successful completion of the project.

S.No	Key personnel / support staff	Name of personnel	Education qualification	Experience	Present Employment and responsibilities
(a)	Director				
(b)	Script Writer				
(C)	Graphic design/computer animation designer				
(d)	Subject Expert/s				
(e)	Any other as required in best interest of the project				
(f)	Attach one pageCVs of I	key personnel v	which will be eva	luated.	<u> </u>

**Please Note:** The bidder may co-opt experts in any other field deemed necessary. During the project, if substitution is necessary (for example, because of ill health or because a staff member proves to be unsuitable, or the member is no longer working with the Agency), the bidder shall propose other staff of at least the same level of qualifications, for approval by the Authority. Approval for any such substitution shall be the sole discretion of Authority. In any case, no escalation in cost shall be considered which may arise due to such substitution of staff/s.

(Signature of Authorised Signatory)

## FORMAT FOR THE CONSENT LETTER FROM TECHNICAL/SUBJECT EXPERT

I\_\_\_\_\_, agree to participate in the project if \_\_\_\_\_\_ is awarded the work of Conceptualization, planning, designing, content development, curation of Gallery Space and supervision & monitoring of the development of the galleries during execution of the work at National Museum, New Delhi.

I understand that if I agree to participate now, I cannot withdraw from the project or refuse to work without any consequences of any kind, except under exceptional circumstances.

I understand that I can withdraw from the project, under the justifiable exceptional circumstances, with a minimum of two weeks' notice, only with the approval of the authority of the National Council of Science Museums.

I understand that my participation involves [outline briefly in simple terms what will be your specific work for this project]

I understand that no financial or other benefit, directly or indirectly, will be given to me by the National Council of Science Museums for participating in this project.

I understand that in any report on the results of this project my identity will remain anonymous and no credit for this project will be directly attributed to me.

I understand that I will have no claim on the content that I will provide for this project as an expert.

I understand that I am free to contact any of the people involved in the project to seek further clarification and information.

Signature & Seal of the Expert (Name and Designation of Expert) Signature & Seal of the Bidder

## Annexure-F

# FORMAT FOR ANNUAL TURNOVER AS PER THE AUDITED ACCOUNTS

# **TOWARDS THE QUALIFYING EXPERIENCE**

S. No.	Financial Year	Turnover in Indian Rupees(INR)
1.	2017-18	
2.	2018-19	
3.	2019-20	

(In case of Consortium, the Turnover of only lead partner needs to be mentioned)

(Signature of Authorised Signatory)

This is to certify that the above information has been examined by us on the basis of relevant documents; books of accounts & other relevant information and the information submitted above is as per record and as per details annexed.

Signature, Address, Seal & Membership No of Chartered Accountant.

#### **ANNEXURE-G**

# NATIONAL COUNCIL OF SCIENCE MUSEUMS SECTOR-V, BLOCK-GN, BIDHANNAGAR KOLKATA: 700 091.

#### TENDER NO.18012/7/20(234)

#### DECLARATION

We do hereby accept the "Scope of Work, Bill of Quantities, General Terms & Conditions etc. as provided by the National Council of Science Museums along with the Tender documents for the work of Conceptualisation, Design, Supply, Installation, Testing and Commissioning of 3D Projection Mapping Multimedia Show including related Civil, Mechanical, Structural & Electrical work at National Gallery of Modern Art (NGMA), New Delhi and also under take to supply the said materials and carry out the work within the stipulated time strictly as per the Scope of work and Technical Specifications of National Council of Science Museums as provided along with the tender documents, in the event of placement of any order on us. The NCSM shall be at liberty to cancel the order in full or part, in the event of failure of the above declaration made by us.

ANNEXURE - H

## FORMAT FOR ARTICLES OF AGREEMENT

## **INSTRUCTIONS** (not to be typed in Agreement)

(Articles of Agreement have to be typed on non-judicial stamp paper. The value of the stamp paper varies from state to state and is to be known from the particular place. The stamp paper will be purchased by the successful e-tenderer and the agreement may be typed by the Museum/Centre according to the format.)

ARTICLES OF AGREEMENT made at	
	(Place)
	day of
(Date)	(Month & Year)
between the	
	the parent Museum/Centre)
(under the National Council of Science Mus Act of West Bengal, 1961), hereinafter r include its successors and assigns on the c	seums, a Society registered under the Societies Registration referred to as the Museum/Centre which expression shall
trading in the name and style of	the successful e-tenderer)
hereinafter referred to as the successful e- heirs, executors, administrators and assign WHEREAS the Museum/Centre is d <i>(Name of the work)</i> Notice Inviting E-tender (Including apper describing the work and conditions of contr	e address of the successful e-tenderer) -tenderer which expression shall include his/their respective s on the other part. esirous of getting the work of
	nd address of the Bidder).

AND WHEREAS the said NIT (including appendix) drawings as per list attached, specifications and the priced schedule of quantities and conditions of contract have been signed by or on behalf of the parties hereto. AND whereas the Successful e-tenderer has deposited in Bank Draft/Pay Order/ NEFT/RTGS

the amount being 10% of the ordered value of the e-tender) with the Museum /Centre as Security Deposit for the due performance of this Agreement as provided in the said conditions.

NOW IT IS HEREBY AGREED AND DECLARED BY AND BETWEEN THE PARTIES HERETO AS FOLLOWS:

- 1. In consideration of the payments to be made to him as hereinafter provided the successful etenderer shall upon and subject to the conditions herein contained execute and complete the work within ...... months from the date of issue of letter of intent / Work Order (as defined in the scope of work of the NIT) and as per the said drawings and such further detailed drawings as may be furnished to him from time to time and described in the said specifications and the said priced schedule of quantities along with the progress of the building work.
- 2. The Museum/Centre shall pay to the successful e-tenderer such sum as shall become payable hereunder at the time and in the manner specified in the said conditions.
- 3. Time is the essence of this agreement and the successful e-tenderer shall proceed with the work, throughout the stipulated period of this contract, strictly according to the CPM/PERT/BAR CHART attached herewith and forming a part of this agreement. At any stage during execution, if any work lags behind the target as indicated in the CPM/PERT/BAR CHART for reasons directly attributable to the successful e-tenderer, he shall pay or allow the Museum/Centre to deduct from any money due to him a liquidated damage as per Clause 11(iii) of the conditions of contract.
- 4. This agreement comprises the work above and all subsidiary works connected therewith, even though such works may not be shown on the drawings, or described in the said specifications or the priced Schedule of Quantities.
- 5. The Museum/Centre through the Engineer reserves to itself the right of altering the drawings and of adding to or omitting any item of work or of having portions of the same carried out departmentally or otherwise and such alterations or variations shall not vitiate this agreement.
- 6. All disputes and differences of any kind whatever, arising out of or in connection with the contract on the carrying out of works (Whether during the progress of the work or after their completion and whether before or after the determination, abandonment or breach of the contract) shall be referred to arbitration as per Clause 12(xvi) of Annexure A of the said

conditions of contract. In case of any legal dispute, other than the arbitration, the court of jurisdiction shall be at the place written in the first line of this agreement.

The provisions of the Arbitration & Reconciliation Act 1996 or any statutory modification or reenactment thereof and of the rules made there under for the time being in force shall apply to arbitration proceedings under this clause.

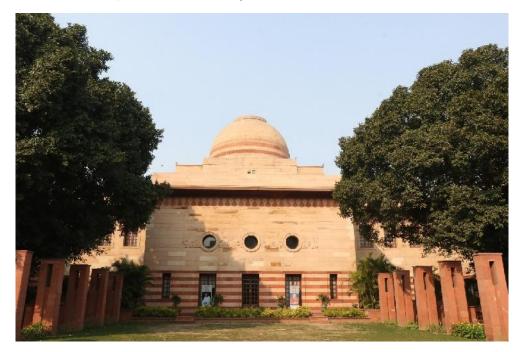
In witness whereof the parties have set their respective hands the day and the year and the place hereinabove written.

Signed by for and on behalf of the Museum/Centre

(Controller of Administration)						
In the presence of						
	1.					
Seal		(Dy Controller, Finance & Accounts)				
	2					
		(Project Co-coordinator/Engineer)				
Signed by the said Successful e-ten	lerer					
In the presence of						
	1.					
Seal						
	2.					

Page | 45 Conceptualisation, Design, Supply, Installation, Testing and Commissioning of 3D Projection Mapping Multimedia Show including related Civil, Mechanical, Structural, Electrical work and integration with existing Façade Lighting and 3 years of comprehensive maintenance and operation of equipment and show at National Gallery of Modern Art, New Delhi. Images, Plan and suggestions for Façade Lighting of Jaipur House, NGMA, New Delhi

A. Façade of Jaipur House for Primary Show, NGMA



B. Side View of Façade of Jaipur House to be made up with lighting of luminaries, NGMA



Page | 46 Conceptualisation, Design, Supply, Installation, Testing and Commissioning of 3D Projection Mapping Multimedia Show including related Civil, Mechanical, Structural, Electrical work and integration with existing Façade Lighting and 3 years of comprehensive maintenance and operation of equipment and show at National Gallery of Modern Art, New Delhi. C. Front View of Secondary Façade of Jaipur House for Secondary Show, NGMA



D. Side View of Secondary Façade of Jaipur House for Secondary Show, NGMA



The bidder should fill the format of all major equipment and accessories supplied for the tender

Conceptualisation, Design, Supply, Installation, Testing and Commissioning of 3D Projection Mapping Multimedia Show including related Civil, Mechanical, Structural & Electrical work at National Gallery of Modern Art (NGMA), New Delhi.

SI. No	Offered Equipme nt	Make / Mode	Specifi cation	Understo od the scope of work for the developm ent of Software/ content (Yes/No)	Project timeline if not submitte d	System Integratio n /flowchart individual exhibit
Equipment						
Software						
Power Backup						

# <u>Annexure – K</u>

# Sample Cost Breakup sheet

# Original cost break – up sheet has been provided separately which should be filled up and uploaded as cover II of Financial Bid

SI no.	Description of Item as per BoQ	Qty.	Unit	Basic Rate in INR	GST %	Total Amount in INR without GST	Total Amount in INR with GST

Annexure - L

## DECLARATION ON REGISTRATION AS MSME

(Following declaration to be provided by the Vendor on the Company letterhead)

This is to certify that our Company (*Name of the Company*) located at (Address of the Company) has registered as MSME. The details of registration are provided below:

SI	Particulars	Details
1	Vendor Code (allotted by BEL)	
2	Name of the Vendor / Company	
3	Date of incorporation	
4	UdyogAadhaar Number	
5	GST number	
6	PAN number	
7	Type of Enterprise	Micro / Small / Medium
8	Major activity	
9	Type of Organization	Proprietary / Hindu Undivided Family / Partnership / Co-operative / Private Limited Company / Public Limited Company / Self Help Group / Limited Liability Partnership / Society / Trust / Non- MSME (not a MSME)
13	Have your investment in plant and machinery crossed the prescribed limits of MSME Act	Yes / No Value (for MSME Only) :
14	Copy of UdyogAadhaar	(for MSME only) : Yes / No

I / we undertake to keep the National Council of Science Museums (NCSM) informed if at any point in future, we cease to become MSME vendor or change in category as per the extant rules and such disclosures is entirely our responsibility. Until then, the company does not hold NCSM as responsible for any issues related to MSME

Signature of Authorized Person with Company Seal

Date:

Annexure-M

## BID SECURITY DECLARATION FORM

Date: \_\_\_\_\_

Tender No. 18012/7/20(234)

То

Dy. Controller of Store and Purchase National Council of Science Museums 33, Block GN, Sector – V, Salt Lake, BidhanNagar, Kolkata – 700091

I/We. The undersigned, declare that:

I/We understand that, according to your conditions, bids must be supported by a Bid Security Declaration.

I/We accept that I/We may be disqualified from bidding for any contract with you for a period of **three years** from the date of notification if I am /We are in a breach of any obligation under the bid conditions, because I/We

- a) have withdrawn/modified/amended, impairs or derogates from the tender, my/our Bid during the period of bid validity specified in the form of Bid; or
- b) having been notified of the acceptance of our Bid by the purchaser during the period of bid validity
  - (i) fail or refuse to execute the contract, if required, or
  - (ii) fail or refuse to furnish the Performance Security, in accordance with the RFP terms.

I/We understand this Bid Securing Declaration shall cease to be valid if I am/we are not the successful Bidder, upon the earlier of (i) the receipt of your notification of the name of the successful Bidder; or (ii) thirty days after the expiration of the validity of my/our Bid.

Date:

Signature of Authorized Person with Company Seal

**Note**: In case of a Joint Venture, the Bid Securing Declaration must be in the name of all partners to the Joint Venture that submits the bid

## **ANNEXURE-N**

# NATIONAL COUNCIL OF SCIENCE MUSEUMS SECTOR-V, BLOCK-GN, BIDHANNAGAR KOLKATA: 700 091.

# TENDER NO.18012/7/20(234)

# DECLARATION

We do hereby declare that we have quoted the rate for all the items in the cost break up sheet of Annexure K and the total rate including GST quoted in the cost break up sheet is same as the rate quoted in item Rate BoQ of excel sheet (Annexure C).