

Tender ID : 2023_NCSM_780913_1

Tender Reference Number : I-18012/7/23(257)

Tender Title : **Supply, Installation, Integration, Testing and Commissioning (SITC) of Digital Planetarium and onsite comprehensive warranty, post warranty comprehensive maintenance and operation post installation at Science Learning and Creativity Centre, Shimla**

Technical Bid Corrigendum

Competent authority has made some changes(Amendments) in respect of the aforementioned tender. The amendments are attached herewith. It is requested to quote the offers along with compliance of the changes made to this tender.

NATIONAL COUNCIL OF SC SCIENCE MUSEUMS

33 Block GN, Sector-V, Bidhannagar

Kolkata-700091

Tender No. I-18012/7/23(257)

Name of the Work: Supply, Installation, Integration, Testing and commissioning of 8 meter diameter Digital Planetarium (including hardware, software, content and all accessories) along with perforated dome at the proposed Planetarium at Village Shoghi, Anandpur, Shimla, Himachal Pradesh.

A. TECHNICAL CORRIGENDUMS

1. **Turnover Eligibility:** Clause no. 2. v. of **GENERAL TERMS AND CONDITIONS**. It has been proposed that the Average annual Turnover of the agency may be modified as under considering provisions and guidelines as per GFR and corrigendum may be published as under

Clause As per NIT	Proposed Amendment
Turnover Eligibility: The Average Annual Turnover of the Bidder (of the lead partner in case of consortium/JV) for the best three of last five financial years (2018-19, 2019-20, 2020-21, 2021-22 and 2022-23) should be minimum INR 5.00 Crore.	Turnover Eligibility: The Average Annual Turnover of the Bidder (i. In case of bidder being Indian Chanel partner of OEM the turnover of the OEM shall be considered. ii. in case of consortium/JV the turnover of the lead partner should fulfil the requirement) for the best three of last five financial years (2018-19, 2019-20, 2020-21, 2021-22 and 2022-23) should be minimum INR 2.00 Crore.

2. **Scope of Contract:** Clause no. 3. j. of **GENERAL TERMS AND CONDITIONS**. It has been proposed that the payment of Custom / import duty and GST may be kept out of the scope of the quote as the same is proposed to be paid by the client as per the existing provision in all other such tenders of NCSM the tender clause is proposed to be modified as under through corrigendum:

Clause As per NIT	Proposed Amendment
RATES The rates quoted by the Successful bidder shall be paid at net rates. They should include in their rates allowance for increase or decrease in the prices due to market fluctuation. Bidders shall not be entitled to any separate amount on account of GST, other taxes, Labour Cess, 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.	RATES The Basic rates quoted by the Successful bidder shall be paid at net rates for SITC including the component of shipping, transportation and labour charges etc. The bidder should include in their rates allowance for increase or decrease in the prices due to market fluctuation. However, the custom / import duty and GST etc. shall be paid by the client on actual basis as per the demand directly to the concern authority or reimbursed to the vendor as the case maybe and shall not be part of the rate quoted by the bidder. Accepted e-tender rates shall not be changed due to changes in wages of labour either.

3. **Scope of Work:** Clause no. 4. (8). of **GENERAL TERMS AND CONDITIONS**. It has been proposed that the Soundproofing and acoustic treatment may be kept out of the scope of this contract as the specifications for the same differs from the requirement of OEM. However it is proposed that the agency shall provide handholding for the same with the client to get the best possible result as per their requirement. The tender clause is proposed to be modified as under through corrigendum:

Clause As per NIT	Proposed Amendment
Soundproofing and acoustic treatment of the dome theater including ceiling & walls of the theatre building, acoustic/insulation jacket for Dome Screen shall be under the scope of the work.	Soundproofing and acoustic treatment of the dome theatre including ceiling & walls of the theatre building, acoustic/insulation jacket for Dome Screen shall not be under the scope of the work. However the agency shall provide handholding for the same with the client to get the best possible result as per the requirement.

4. **Scope of Work:** Clause no. 4. (9). of **GENERAL TERMS AND CONDITIONS**. It has been proposed that the clause be modified as under:

Clause As per NIT	Proposed Amendment
Entire system shall be provided with rugged, fool proof industrial grade online 3 phase UPS with backup of minimum thirty-minute duration including surge protection. The make and configuration of such a system will be finalized strictly as per the recommendation of the OEMs and the successful bidder will be responsible for any damage caused to the system due to power surges or any power related breakdowns during warranty/extended warranty..	Entire system shall be provided with rugged, fool proof industrial grade online suitable UPS with backup of minimum thirty-minute duration including surge protection. The make and configuration of such a system will be finalized strictly as per the recommendation of the OEMs.

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5. **Scope of Work:** Clause no. 4. (16 17, NOTE & **Client's responsibilities**). of **GENERAL TERMS AND CONDITIONS**. It has been proposed that the clause be modified as under:

Clause As per NIT	Proposed Amendment
Client's responsibilities: <ul style="list-style-type: none"> • Providing electrical power for execution of the work. • Providing lockable space for storage of materials by the selected vendor. 	Client's responsibilities: <ul style="list-style-type: none"> • Providing electrical power for execution of the work. • Providing lockable space for storage of materials by the selected vendor. • Soundproofing and Acoustic work as per the specification and drawings provided by the OEM

6. **SCHEDULE:** Sl. No. 13 of Schedule of NIT . (9). of **GENERAL TERMS AND CONDITIONS**. It has been proposed that the clause be modified as under:

Clause As per NIT	Proposed Amendment
13. EMD - ₹6,25,000/-	13. EMD - ₹6,25,000/- To be deposited through demand draft drawn on any Nationalised Bank/ Certified Cheque from a Nationalised/ Commercial Bank or insurance surety bond or fixed deposit receipt or bank guarantee or online transaction in the account of NCSM as per Annexure-H.

7. Clause no. 5. (iii & iv) of **GENERAL TERMS AND CONDITIONS**.. It has been proposed that the clause be modified as under:

Clause As per NIT	Proposed Amendment
iii. The date on which the entire project is complete with necessary training and handing over shall be treated as the “ successful date of completion ”. The 50% of Retention Money will be released to the agency after 3 years of warranty/ defect liability period (post successful date of completion) and on providing satisfactory completion certificate of services and handing over the equipment setup in original & proper working condition. iv. If the agency has entered into CAMC for a period of the entire setup with NCSM for a period of 2 years post the Defects Liability Period of 3 years then balance 50% of the Retention Money shall be refundable after satisfactory completion of the Comprehensive Annual Maintenance Contract period with NCSM as detailed under TERMS OF PAYMENT else balance 50% of Retention Money shall be refundable to the agency after 3 years of warranty/ defect liability period.	iii. The date on which the entire project is complete with necessary training and handing over shall be treated as the “ successful date of completion ”. The 50% of Retention Money will be released to the agency after the completion of the project the balance 50% of the retention money shall be released after 3 years of warranty/ defect liability period (post successful date of completion) and on providing satisfactory completion certificate of services and handing over the equipment setup in original & proper working condition. iv. If the agency has entered into CAMC for a period of the entire setup with NCSM for a period of 2 years post the Defects Liability Period of 3 years then 10% of the quoted annual CAMC charges is to be deposited by the agency as Retention Money and the same shall be refundable after satisfactory completion of the Comprehensive Annual Maintenance Contract period with NCSM/ client as detailed under TERMS OF PAYMENT .

8. Clause No. 7 of GTC - PROPOSAL EVALUATION / SELECTION CRITERIA

B Technical Evaluation Marking Scheme sr. No. 2 is proposed to be amended as under

Clause As per NIT			Proposed Amendment		
2	Financial Soundness (average annual turnover [of Lead Partner in case of consortium] during best three of the last five years (2018-19, 2019-20, 2020-21, 2021-2022, 2022-2023)	i. For average annual turnover above Rs.5.00 Crore -5 marks ii. For average turnover in excess of Rs. 5.00 Crore @ 1 mark per Rs. 1.00 Crore each Maximum Marks - 10 marks.	2	Financial Soundness (average annual turnover [as per clause no. 2. v. amended] during best three of the last five years (2018-19, 2019-20, 2020-21, 2021-2022, 2022-2023)	i. For average annual turnover above Rs.2.00 Crore – 5 marks ii. For average turnover in excess of Rs. 2.00 Crore @ 1 mark per Rs. . 1.00 Crore each Maximum Marks - 10 marks.

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9. Clause No. 7 of GTC - PROPOSAL EVALUATION / SELECTION CRITERIA

B Technical Evaluation Marking Scheme sr. No. 6 and 7 is proposed to be amended as under

Clause As per NIT				Proposed Amendment			
6	Upscaling of system for future readiness	Conversion to 3D planetarium system- 3 Marks ● Hardware setup for 6k or 8k ready- 2 Mark Maximum Marks - 5 Marks	5	6	Deleted		0
7	Technical presentation before the Technical Evaluation Committee	a. Design of dome 2D theatre and planetarium as per scope of work and technical specifications given in the tender document. It is preferable that vendor should do site visit for proposing accurate design considering site condition 10 Marks b. Technology adopted / quality of proposed equipment- 5 Marks c. Acoustic treatment of the entire theatre including top surface of AI dome, inner surface of civil structure above AI dome, inner walls of the theatre to achieve best quality noise free audio – 5 Marks d. Show designing capability using Stellarium software or equivalent with available libraries– 10 Marks e. Offered films as specified keeping in mind the parameters Content relevance, release date, language, running time etc. – 5 marks f. Concept design, clarity of thought, neatness in setup planning-5 marks Maximum Marks – 40 marks	40	7	Technical presentation before the Technical Evaluation Committee	a. Design of dome 2D theatre and planetarium as per scope of work and technical specifications given in the tender document. It is preferable that vendor should do site visit for proposing accurate design considering site condition 15 Marks b. Technology adopted / quality of proposed equipment- 5 Marks Deleted d. Show designing capability using Planetarium software or equivalent with available libraries– 10 Marks e. Offered films as specified keeping in mind the parameters Content relevance, release date, language, running time etc. – 10 marks f. Concept design, clarity of thought, neatness in setup planning-5 marks Maximum Marks – 45 marks	45

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<p>NOTE: The bidder will have to enclose a presentation on the concept note along with the technical proposal and a list of at least 2 nos. free 4k format films (at least 1 nos. on ‘Astronomy’ and others on science related infotainment topics), 3 nos. free 3k format films (at least 1 nos. on ‘Astronomy’ and others on science related infotainment topics) for Planetarium as well as dome Shows in English/ Hindi language. The presentation shall also cover the comprehensive details, approach & methodology, Organization structure, Work program, Implementation strategy, offered equipment list, Technical brochures and specification sheet, timeline etc. Vendors are requested to mention the hyperlink (youtube/ other platform) with respect of offered films as per parameter 7(e) above</p>	<p>NOTE: 1. The bidder will have to enclose a presentation on the concept note along with the technical proposal and a list of at least 5 nos. 3k format films professionally created by them (at least 2 nos. on ‘Astronomy’ and others on science related infotainment topics) for Planetarium as well as dome Shows in English/ Hindi language. The presentation shall also cover the comprehensive details, approach & methodology, Organization structure, Work program, Implementation strategy, offered equipment list, Technical brochures and specification sheet, timeline etc. Vendors are requested to mention the hyperlink (youtube/ other platform) with respect of offered films as per parameter 7(e) above.</p> <p>2. The agency who score a minimum of 70% marks as per above evaluation criteria will be considered technically qualified for opening of Financial bid.</p>
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10. Clause No. 7 of GTC – C. Financial Evaluation

Financial Bid: b, c and d are proposed to be amended as under:

Clause As per NIT	Proposed Amendment
<p>b) The lowest financial bid would be the best financial bid.</p> <p>c) Only fixed price financial bids indicating total price for all the work/services specified in this bid document will be considered.</p> <p>d) Details of the taxes and duties leviable on the basic cost of the equipment of set up and services to be indicated clearly in the financial bid.</p>	<p>b) The lowest financial bid would be the best financial bid quoted exclusive of Custom duty and GST etc.</p> <p>c) Only fixed price financial bids indicating Basic price for all the work/services specified in this bid document will be considered excluding Custom duty and GST etc. which are to be paid by the client</p> <p>d) Details of the taxes and duties liveable on the basic cost of the equipment of set up and services to be indicated clearly in the financial bid by the bidder however the same shall not be included in the final basic price.</p>

11. Clause No. 10 of GTC – C. Financial EVALUATION

Financial Bid

Clause As per NIT			Proposed Amendment		
Total Contract Payment shall be on progressive basis as per the breakup in the following table:			Total Contract Payment shall be on progressive basis as per the breakup in the following table:		
Sl. No.	On completion of	Payment admissible	Sl. No.	On completion of	Payment admissible
3	After completion of 3 years defect liability period and successful operation	Refund of 50% of Security Deposit	3	i. After successful completion of 1 st year’s defect liability period.	50% of Retention Money to be refunded
4	After completion of 2 years of CAMC and successful operation	Refund of balance 50% of Security Deposit		i. After successful completion of 2 nd year’s defect liability period.	Refund of 25% of Security Deposit
				i. After successful completion of 3 rd year’s defect liability period.	Refund of balance 25% of Security Deposit

12. The Delivery Clause for Imported Items: For imported products, the successful bidder shall responsible for complete delivery up to the final destination i.e. SLCC Shimla. All costs till the point of delivery shall be covered by successful bidder including packing, forwarding, freight, loading, unloading, insurance etc. as may be applicable to this tender whereas the duty payment in India (Custom Clearance) shall be covered by NCSM at actuals.

13. The following Annexures of the tender are proposed to be amended through corrigendum:

Clause As per NIT	Proposed Amendment
ANNEXURE-A - TECHNICAL (TECHNO-COMMERCIAL) BID	ANNEXURE-A(Amended) - TECHNICAL (TECHNO-COMMERCIAL) BID
ANNEXURE-F - DETAILED TECHNICAL SPECIFICATIONS AND INDICATIVE BILL OF QUANTITIES	ANNEXURE-F(Amended) - DETAILED TECHNICAL SPECIFICATIONS AND INDICATIVE BILL OF QUANTITIES
ANNEXURE-I -FINANCIAL BID FORMAT	ANNEXURE-I(Amended) -FINANCIAL BID FORMAT
ANNEXURE-J - COST BREAKUP SHEET	ANNEXURE-J(Amended) - COST BREAKUP SHEET
ANNEXURE-M – PRODUCT CATALOGUE CHECKLIST	ANNEXURE-M(Amended) – PRODUCT CATALOGUE CHECKLIST
ANNEXURE H- Bank Details	ANNEXURE H-Bank details (Revised/ Corrected)

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A. BOQ CORRIGENDUM

Clause As per NIT	Proposed Amendment
BOQ	BOQ may be amended as per the proposed amendments as attached. (A separate corrigendum for amendments/ revisions of BoQ (Excel Sheet) is published.)

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ANNEXURE-A (Amended)

NATIONAL COUNCIL OF SC SCIENCE MUSEUMS
33 Block GN, Sector-V, Bidhannagar
Kolkata-700091

Tender No. I-18012/7/23(257)

TECHNICAL (TECHNO-COMMERCIAL) BID

Sl.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	i) Copy of ESI registration certificate, if applicable ii) Copy of EPF registration certificate, if applicable 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.	Submitted/ Not Submitted	
10	Copy of valid electrical License of the /firm/lead firm Submitted/	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.	Submitted/ Not Submitted	
12	Enclose the contact details (including name, mobile/ landline no. etc.) of the person of operational maintenance of the setup		

Technical Eligibility Criteria			
13	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 eTender. Documents required: 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.(Annexure – G)	Submitted/ Not Submitted	
14	The Average Annual Turnover of the Bidder (of the lead partner in case of consortium/JV) for the last three financial years (2018-19, 2019-20, 2020-21, 2021-22, 2022-23) should be minimum INR 2.00 Crore. Documents Required: Turnover of the bidder i. In case of bidder being Indian Channel partner of OEM the turnover of the OEM shall be considered. ii. in case of consortium/JV the turnover of the lead partner should fulfil the requirement and the duly certified document from CA clearly indicating the Turnover of the last five financial years (2018-19, 2019-20, 2020-21, 2021-22, 2022-23) (Annexure –E)	Submitted/ Not Submitted	
15	The Bidder should have completed the similar works during the last 5 years from the date of the issue of this eTender as per the details given below. One similar work of value not less than 80% of the estimated cost of project OR Two similar works each of value not less than 50% of the estimated cost of project OR Three similar works each of value not less than 40% of the estimated cost of project (Annexure-G)	Submitted/ Not Submitted	
16	Operation and Maintenance for planetarium show(Annexure-G)	Submitted/ Not Submitted	
17	Bidders should submit the PDF file of the Product Catalogue with the technical bid as per the checklist (Annexure-M).	Submitted/ Not Submitted	
18	Name and details of the Manufacturer whose components are provided for the project (as per Annexure G1)	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. Sl no-12 to 14 above.	Submitted/ Not Submitted	
20	Declaration of Registration as MSME (Annexure – D)	Submitted/ Not Submitted	
21	Recommended seating arrangement for the theatre where the equipment(s) offered shall be housed (Submit detailed design and drawing of sitting layout)	Submitted/ Not Submitted	
22	Single point contact details for all post- installations service related issues with hierarchy levels (if any)	Submitted/ Not Submitted	
23	Detailed address and set up link from where support for maintenance during post warranty shall be offered by the firm at Shimla (Himachal Pradesh)	Submitted/ Not Submitted	
24	Shelf-life time of the Digital immersive 2D projection system (i.e. up to which period technical support as well as spare parts including consumables shall be available with the firm).	Submitted/ Not Submitted	

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

Date:
Official Seal
Attorney

Signature of the Tenderer /Constituted

NATIONAL COUNCIL OF SC SCIENCE MUSEUMS

33 Block GN, Sector-V, Bidhannagar

Kolkata-700091

Tender No. I-18012/7/23(257)

DETAILED TECHNICAL SPECIFICATIONS AND INDICATIVE BILL OF QUANTITIES

Fully Integrated “8 METER DIGITAL PLANETARIUM SETUP” consisting of an 8 meter powder coated/painted aluminium dome with a hanging/ fixing arrangement, single projector with compatible fish-eye lens arrangement to project the film on the entire dome screen, Media Server/s for astronomy & playback simulation software/system, UPS system, 5.1 surround sound system, show control system etc.for the visitor area having 55-60 persons seating capacity with unidirectional seating arrangement in . The detailed technical specifications of the complete hardware system are provided below:

Sl.No.	Item	Detailed Technical Specs and description	Quantity
1.	Planetarium Dome	<p>The 8 m diameter dome design must incorporate perforated aluminum panels to be painted/ powder coated on site and prefabricated structural aluminum ribs, equally spaced.X-bracing shall be provided to maintain proper rib alignment of the dome screen. The panels of the dome must be shaped with a special stretch form machine. It is preferred not more than 60 panels on the dome to limit the number and appearance of seams/joints. The panel perforations should be made of maximum 1.6 mm diameter holes (smaller than star images). The holes should create a void area of approximately 22% of the screen. (may be around 20% after final coating).The dome must be installed horizontally. The aluminum panels must be connected to the supportingstructure by low profile dome head rivets. The rivets must be the same colour as the screen.</p> <p>A 360 °Aluminum Cove Trough should be provided and fixed at the Horizon of the Dome (spring line) without compromising the projection Horizon.</p> <p>The dome must be strong enough to support audio speakers and special effects mounted behind the dome itself. This construction technique must provide for outstanding acoustic and visual properties.</p> <p>The dome must allow optimum air circulation.</p> <p>The projection surface is to be factory primed then painted-in-place or powder coated, by a factory technician with a non- bridging flat coating. The overall reflectivity must be of 0.53.</p> <p>The seams where the panels join shall be overlapped by no more than 29 mm and shall have an opaque flat black material of minimum thickness between the layers. The panels shall be secured to the ribs using low profile aluminum rivets. Vertical and horizontal seams shall not be located where there are no structuralelements available for support”. Acceptable OEMs: Astrotec, Spitz or equivalent</p>	1 No.

2.	Projection system	<p>It must consist of a single projector, which will evenly cover the entire dome with a uniform image with therequired image resolution.</p> <p>The projector should be installed in the center of the planetarium at horizon level (spring line) of the screen.</p> <p>Stable mechanical structure should be provided to support and fix the projector. The mounting of the projector must be designed to allow for maintenance, servicing as well as the proper air/heat dissipation according to the requirement as specified by the manufacturer.</p> <p>The resolution should be of at least 4.5 million effective pixels on the dome in 4K UHD Resolution. More than 2600 pixels achievable on wobulated pixel across the meridian on average. In native resolution WQXGA+ the system must obtain at least 2 million effective pixels on the dome in (i.e. more than 1750 pixels on the meridian on average). The Contractor will have to provide within the tender reply the calculations of such effective resolution. Calculations must be reliable and presented explicitly. The term "effective pixels" means that even if a pixel at some points in the dome is formed by more than one light beam from more than one projector, that pixel must be counted as one.</p> <p>The brightness of the projected image across the dome must be the same and be of at least 30 Lux when using native or 4K UHD resolution. The number of frames per second displayed must be of minimum 60 fps.</p> <p>The projection system must be connected to the main computer located in the server room.</p> <p>Projector: The projection system must consist of 1 digital projector, with a native resolution of at least 2700 X 1600 pixels and has to offer a 3840 x 2400 resolution using wobulated technology (4K UHD). The light source should be laser diode/ laser phosphor. The lifetime of the light source should be at least20,000 hours.</p> <p>The projector should be DLP with Contrast (On/off) of the projector must be at least 10000: 1</p> <p>The brightness of the projector must be at least 12,000 ISO lumens (Note: 1 ANSI lumens= 0.8xISO lumens conversion formula shall be used).</p> <p>If the projectors require additional cooling or air supply, it must be integrated with the installation.</p> <p>Lens Options: The projector must be fitted with a fish-eye lens specifically designed for single projector configurations on a dome-screen. Fisheye conversion lenses or mechanical adaptors will not be accepted. Lens installation must ensure adequate illumination and low distortion at the edge of the image. The vertical</p> <p>FOV should be minimum enough to position tip of the projector to avoid visual obstruction. A lens aperture (F/#) of F/2.5 and a transmittance of81-89% are preferred.</p> <p>Accessories: All standard accessories including IRremote, Low loss video signal cables etc. Acceptable OEMs: Barco/Christie/Panasonic/Sony/ NEC or equivalent</p>	As per proposed technology
3.	Media Creation, Image Generator Server and Playback System with dome show and planetarium software	<p>Image Generator server/s complete with industrialgrade components- CPU: Minimum of 8 cores, 16 threads, minimum 16 MB Cache or Higher processor. 32 GB RAM or higher @ 2900 MHz or more. Graphics card with at least 5880 CUDA Core, 1.5 GHz base frequency, 8 GB DDR6, 1.7 GHz boost frequency. 2 x SSD having minimum 1 TB size.</p> <p>Licensed OS and all necessary drivers.</p>	As per proposed system + 1 spare as standby

		<p>Backlit keyboard & mouse, joystick, cables & connectors as required.</p> <p>The system must be able to display images from various sources: * From astronomy software, calculated in real time * From previously prepared shows, encoded in popular formats such as XVID-H.263, AVC- H.264, HEVC-H.265 * Obtained from an external source via streaming.</p> <p>Other requirements: * Should drive projector/s for dome show films and planetarium. * Should provide synchronization between images/videos projected onto the dome for a seamless image/ video without any tearing. * Should provide synchronization of multilingual audio tracks with the projected film shows. * Additional SSD and RAMs may be configured to meet the overall specifications, if necessary. Acceptable OEMs: Dell, HP or equivalent</p>	
4.	Show Control System	<p>An integrated Show Control System, capable of controlling all hardware, other equipment, including the display system, audio, media, cove, lighting system, exit and emergency exit signage lighting. The Show Control System comprising of Table top control panel with Communication protocols: RS 232, TCP/IP OR Table top control panel with Communication protocols: RS 232, TCP/IP & Apple iPad Pro 12.9 inch (256 GB)having following features:</p> <ul style="list-style-type: none"> • On/Off Control: Projectors, Illumination, Audio and Dimmer control for COVE lighting • • Interactive screen for controlling DIGITAL PROJECTION SYSTEM <p>The screen for table top control panel should have following: Display size: 26 inch (diagonal), Display Resolution: 1920X1080 or better</p>	1 Set
5.	Interactive Planetarium Software with available libraries	<p>Latest version of the reputed OEM interactive planetarium and 2D playback software with perpetual license or open- source for playback of dome video shows and planetarium shows and may have facility to convertlarge format shows into dome shows so the shows developed by different developers around the world may be used.</p> <p>Note: All details in this regard are to be provided by the bidder.</p> <p>Show elements: Digital library/ Cloud access of the planetarium datasets for development of in- house planetarium shows.</p> <p>- Software shall have built in backup feature so asto allow backup for all hard drives.</p> <p>- Wrap up software with bilingual (English & Hindi) text editor shall be supplied for creating 2Ddome shows which shall include: volumetric milkyway galaxy in real time, dome videos, dome clips, audio clips, real movie strips, astronomy picture of the day by NASA, still images(regular, panoramas, all-skies) etc. having provision for online updating.</p> <p>Show Manager: should be capable of integrating user created artwork, video clips, sound etc. and compatible with rendering images on the entiredome.</p> <p>Show Player: reproduction & control of shows, image distribution to various channels, distortion correction, brightness and gamma adaptation and diaphragm calculations should be effective in real time in the software.</p> <p>Note: List of show elements for creating in houseshows shall be provided.</p>	1 No.
6.	Integrated Audio System	<p>a) 5.1 Surround Sound Audio System integrated with projection system inclusive of speakers, 8-channel audio mixer, power amplifier, installation, wiring, etc.for adequate coverage and even SPL of 85dB +/- 3dB for video playback content for all 55-60 persons audience seats. Rates to be quoted inclusive of all software, hardware, electrical/data/necessary cables, network components and/or any supportive technologies required to make fully functional as per proposed system.</p>	1 Set

		<p>Note: The equipments comprising the overall audiosystem shall include the following make: Harman/D&B/ L-Acoustics/ Bose/ JBL/ AKG/ Yamaha</p> <p>b)The audio system should be integrated with digital cordless microphones (2 nos.) comprising of 1 no. cordless handheld microphone & 1 no. cordless lapel microphone complete sets including receiver unit, rechargeable Lithium-ion battery, battery charger docking station etc.</p> <p>Preferred Make: Shure, Sennheizer or equivalent</p> <p>The mixer, amplifier, mic etc. are to be placed in the control room area in a suitable rack or on a suitable table etc.</p>	
7.	U.P.S. System with parallel redundancy	<p>a) U.P.S system: Suitable minimum 6 KVA TrueSine wave IGBT based system with minimum 30 minutes backup time. Input isolation is needed with surge protection. Preferred brand : APC, Schneider, Numeric, Emerson or equivalent</p> <p>b) Battery bank with suitable rack</p> <p>Please specify the number and brand of SMF batteries as suggested by OEM with detailed specifications. All batteries supplied must be from the same batch of production.</p>	1 No.
8.	LED Cove Light (Cove lighting to be integrated with show control system)	<p>a) LED Cove Light: Beam Angle 120° x 120°, Lumens 16, LED Channels Red / Green / Blue, Mixing Distance 2 in (51 mm) to uniform light, Lumen Maintenance † 50,000 hours L50 @ 50° C (full output)</p> <p>b) Step Lighting: The lighting effect should be created using a fibre optic rod that is end-illuminated with high intensity LEDs with 50,000 hour life expectancy. (The unit should flush with 6mm Carpet)</p> <p>c) Entry & Exit Ramps Lighting: LED wall light should provide 2.2lux at 1.9m distance when mounted approx. 300mm above floor.</p> <p>d) Seat Row Indicators: Seat row indicators should be installed to identify the location of seating rows, to provide illumination for guidance (e.g. by emergency exits) or to illuminate the floor for safe movement in the theater when the main lighting is dimmed.</p>	As per site requirements
9.	Equipment & UPS Rack/ table and suitable chair for show operator	Supply, installation, testing and Commissioning of (i) suitable rack/ table for keeping the equipments in the control room space (ii) UPS battery bank rack etc. in the control room space (iii) Suitable chair for show operator	As per site requirement
10.	Cables & Connectors	Supply and laying of all necessary power cable and connector of ISI approved reputed brand.	1 Job
11.		Supply and laying of all necessary signal/control cable and connector of ISI approved reputed brand.	1 Job
12.		Supply and laying of all necessary Audio cable and connector of ISI approved reputed brand.	1 Job
13.	Miscellaneous	Supply and fixing of all Electrical and Signal accessories concealed in suitable conduit (No open wire should be visible)	1 Job
14.	Acoustic Treatment of Theatre	Acoustic treatment of entire planetarium/ theater including so as to achieve top quality noise free audio in the entire theater (Refer Annexure-F1) Note: Only technical specifications and drawings to be provided.	1 Set
15.	Professionally created 3k format films for Planetarium & dome film shows	The selected bidder shall provide 5 nos. of 3k format films professionally created by them (at least 2 nos. on 'Astronomy' and others on science related infotainment topics) for Planetarium as well as dome Shows in English/ Hindi language.	1 Job

16.	Warranty	The entire setup including the aluminium dome, projector/s, server/s, ups, audio system, lighting etc. shall have warranty of three years from the date of acceptance certificate by NSCD.	1 Job
17.	Onsite Comprehensive AMC	The comprehensive AMC shall be for a period of two years , after expiry of the warranty period of three years.	1 Job
18.	Show operation & Comprehensive AMC	First year of Operation of the shows for the entire year (Rate only: Will be executed separately)	1 Job
		Second year of Operation of the shows for the entire year (Rate only: Will be executed separately)	1 Job
		Third year of Operation of the shows for the entire year (Rate only: Will be executed separately)	1 Job
		Fourth year of Operation of the shows for the entire year (Rate only: Will be executed separately)	1 Job
		Fifth year of Operation of the show for the entire year (Rate only: Will be executed separately)	1 Job
19.	Brochures Engineering drawings	The brochures, documents and engineering drawings have to be provided along with the technical bid. The bidders have to respond within stipulated time for additional information/clarifications sought afterwards, if any.	1 Set
20.	User Training and Documentation	<ul style="list-style-type: none"> - Basic training of two days for 5 executives and 10 days of technical training for 5 participants is required to be organized at SSCS Planetarium. - Training material and complete installation manual in both hard and soft copies is to be provided (two sets of each). - The faculty providing training should be certified from parent company (OEM) or technical and experienced persons from system integrator. - The training provided shall include Architecture, Hardware components, Administration (Hardware and Software Installation, Configuration, Trouble-shooting and Maintenance procedure including preventative maintenance), Alignment and Calibration with usage of instrument and tools, Field replaceable components and applicable procedures for field replacement, Special features of the show control software etc. 	1 Set

Note:

1. Must take prior approval for all the equipment where equivalent makes quoted.
2. Items, where the manufacturers are not mentioned should at least have BIS mark standards.
3. The planning of electrical distribution done considering power supply available at Site.
4. All these quantities may vary as per actual site requirements
5. Equipment delivered should be as per scope of work.
6. Complete system installation design should be full proof & protective against corrosion, dust, rain water and electric leakage current etc.
7. The sound system must be installed at site in such a way that the sound shall be clearly audible to all the people present there at the site without echo.
8. The show will be arranged during the opening hours of the Centre or as approved by SSCP. The show may be operated 364 days a year (365 days for leap year) or at the sole discretion of the Competent Authority. Bidders must build adequate ruggedness for it to be operated 365 days a year.
9. The above-mentioned requirements for the show are indicative and bare minimum; however, the agency has liberty to offer the best of industry installation.
10. Bidders may be required to make technical presentations explaining their offered scheme after opening of Technical & Commercial Bids (Cover-1), if decided by NSCD. The decision of the NSCD in respect of techno-commercial evaluation of Cover-1 of the tender and selection of eligible vendors for opening of Financial Bid (Cover-2) shall be final and binding on the bidders.
11. **Delivery Schedule:** The entire work shall be completed within **12 (TWELVE) months** from the date of placement of order or opening of Letter of Credit whichever is later. Vendor should submit Gantt chart showing critical path of the project.
12. **Warranty and AMC:** The successful bidder shall provide Single Window Onsite Comprehensive Warranty on all the items supplied under the purchase order. The **Warranty period** for the entire installation is for **three years** for all the components of the system from the date of issue of acceptance certificate by NCSM. The comprehensive AMC will be for a period of **two years**, after expiry of the warranty period of three years.
 - i. Bidders shall quote for SITC of the entire system, CAMC charges & Operation charges of the entire setup along with applicable taxes from the date of commissioning and handing over to NCSM on year to year basis. The tax break-up for all such rates shall be clearly spelt out as on the date of submission of the tender.
 - ii. During defect liability period and subsequent CAMC, the following terms shall be applicable.
 - a) Preventive Maintenance for all the equipment and peripherals supplied by the bidder. The bidders shall

- submit a schedule for such preventive maintenance and shall form part of the agreement.
- b) Repair of faulty / defective parts and peripherals.
 - c) Replacement of faulty parts and peripherals. All replaced parts shall remain as property of HIMCOSTE, Shimla.
 - d) During the AMC period (when the life of the batteries is likely to be over) the selected bidder has to replace all the UPS batteries. The batteries shall be provided by HIMCOSTE.
 - e) All the parts including networking cables, connectors, etc. that may be required to maintain the system shall be supplied by the bidder at their own cost.
 - f) Any break-down, failure or malfunctioning of the system shall be attended to and put back in service within 48 hours. However, all round efforts must be made to set right the system in shortest possible time. Service shall be available for 364 days in a year.
 - g) The selected bidder will maintain the minimum essential spares at their own stores and the required tools / test equipments / software so as to reduce the break-down time.
 - h) Spare parts manufactured by Original Equipment Manufacturer (OEM) will be preferred.

However in unavoidable situations spares manufactured by equivalent manufacturers may be used with prior approval of NCSM/ HIMCOSTE.

- i) The titles of the professional 3k format films to be supplied free of cost shall be finalized by the officials of NSCD.
- j) Bidder shall submit the contact details including name, mobile no. etc. for the operational maintenance of the entire setup.

In case of any requirement for replacement of any supplied spares by the bidder, NCSM shall not be responsible for re-export of the damaged components and that will be replaced by the successful bidder.

13. Operation of 2D dome planetarium and film shows for a period of 5 years:

Successful bidder may have to operate full dome shows from 9:00 a.m to 7:00 p.m for the visitors of SSCP, Shimla. This timing may vary during the peak seasons. The show shall remain operational for 364 days in a year (and 365 days in a leap year).

- Manning, operation and maintenance of the system shall be the sole responsibility of the successful bidder at their risk and cost by mobilising their resources and trained technical manpower. Adequate manpower shall be deployed for the complete duration of the operation of the theatre.
- Successful bidder shall operate the system in proper and professional manner without downtime and shall fulfil the statutory obligatory requirements on bidder's part for the purpose of contract.
- All necessary manpower, tools and tackles with allied requirements will be arranged by the successful bidder for operation of the system.
- The date for commencement of operation shall be communicated by NCSM at an appropriate time after successful commissioning of the entire installation. This shall be through a separate written communication after completion of Supply, Installation, Testing, Commissioning and successful completion of training and other compliances as may be applicable to commence operation.
- The bidder or its authorized agency will have to quote separately for operations part.
- The bidder company, if it is a foreign company, can authorize an Indian agency to take complete responsibility of O&M and payments of the O&M amount can be made to the authorized agency directly.

An overall remote supervision of the operations and maintenance should be observed by the foreign bidder in case the O&M responsibility is undertaken by their local agency.

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COST BREAKUP SHEET

Original cost breakup sheet to be provided separately which should be filled up and uploaded ascover II of Financial Bid

S. No.	Description of Item as per BOQ	Qty.	Units	Quoted Currency INR/ Other Currency	Basic Rate (excluding custom duty and GST)	Amount	Custom duty, GST Amount/ Tax Component to be mentioned however the same will be paid by the client)	Total Amount (excluding custom duty & Taxes)
1.	Supply and installation of Projection Dome Screen including all associated structures , minor civil work for installing the dome(all fasteners, grouting etc.) and including cost of scaffolding, labour etc.			Other than INR				
2.	SITC of Projector/s with necessary mounting brakets, cabling, casing etc.			Other than INR/ INR				
3.	SITC of Image Generator Server networked with Image generator workstations.			Other than INR				
4.	SITC of Interactive planetarium and dome configurator and playback software			Other than INR				
5.	SITC of Show control system			Other than INR				
6.	SITC of Automatic Calibration and alignment system			Other than INR				
7.	SITC of Integrated 5.1 surround sound system with all necessary mounting brackets, cabling, wiring etc.(Has to be quoted in			INR				

	INR only)							
8.	SITC of U.P.S System of appropriate capacity (at least 20% more than the full electrical load of the entire projection system) with parallel redundancy with 30 minute backup including electrical panel for distribution of power to the installed equipment. (Has to be quoted in INR only)			INR				
9.	SITC of LED Cove light, staircase lighting, step lights, exit and emergency exit signage etc.			INR				
10.	Training on Dome Projection System			INR				
11.	Any other items of work/equipment etc. not covered above, under Sl. No. 1 to 13 but required as per scope of work & for effective & efficient functioning of the system. <i>(add additional rows as may be required)</i>			Other than INR/ INR				

Total amount in INR of all the items taken together- Excluding Custom duty & GST (to be entered by bidder)	Rs.
Total amount in other than INR of taken together- Excluding Custom Duty (to be entered by bidder)	

** Currency Conversion rate will be taken from RBI website on the date of opening financial Bids.

IMPORTANT NOTES:

1. The bidders shall along with Annexure J submit in their letterhead a detailed list of deliverables along with cost break-up of each item, break-up of taxes of each item as per the following format:

S. No.	scriptionof item	Base rate (INR/ Other than INR)	Quantity	Total amount	Details of taxes and duties with clear break-up of each tax component	Any cost with details	other with	TOTAL

2. The bidders may note that while arriving at the total cost, NCSM shall consider the total cost of initial installation and subsequent cost of operations and maintenance for a period of five years to decide on the lowest bidder. However, the same is not binding and the authorities reserve the right to decide the mode of deciding the lowest bidder.
3. The bidders shall consider the prevailing tax rates while quoting the rates. However, in the event of any changes in the statutory taxes and duties, the rates applicable at the time of payment shall be made by NCSM against submission of supporting documentary evidence.
4. The total cost provided in the cost breakup sheet should exactly match with the total cost quoted in the financial bid.
5. In case there is discrepancy in the cost breakup sheet and the cost quoted in the financial bid, the cost quoted in the financial bid will prevail.

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PRODUCT CATALOGUE CHECKLIST

Building space as per the drawing given shall be provided to the successful bidder. Any minor Civil/Electrical related work at site for installation of system shall be under the Scope of work of the bidder. Details of each requirements to be provided as per the below format:

S. No	Details of Information Required	Qty.	Details	Page No.
			(To be filled by Bidder)	
i.	Details of Civil and electrical work for the projectors and servers enclosures to be taken up by the bidder.	1 Set	Submitted/ Not Submitted	
ii.	Details of Projector/ Projector Array with special mountings. This set should contain number of projectors proposed, its make, complete specifications, its weight, dimensions, details about lenses, heat load, noise generated etc.	1 Set	Submitted/Not Submitted	
iii.	Image Generator Server, Interactive planetarium software and playback system details including specifications and product catalogues. Software for conversion of large format shows into dome and digital library and software for playback and creation of planetarium shows.	1 set	Submitted/Not Submitted	
iv.	Display management ,calibration and alignment system details	1 Set	Submitted/ Not Submitted	
v.	Show control System details	1 Set	Submitted/Not Submitted	
vi.	Networking and data cabling schematic layout	1 Set	Submitted/Not Submitted	
vii.	5.1 surround sound system details including product catalogues, location of speakers etc.	1 Set	Submitted/Not Submitted	
viii.	LED cove lighting, exit and emergency exit signage and LED step lighting with all associated electrical wiring works	1 Set	Submitted/Not Submitted	
ix.	Complete details of U.P.S with 30 minutes back up (with parallel redundant system) including technical catalogues/brochures	1 Set	Submitted/ Not Submitted	
x.	Details of Sound proofing and Acoustic treatment may be submitted along with specifications of materials (locally available materials may be considered), schematic drawings with expected outcome.	1 Set	Submitted/Not Submitted	
xi.	Indicative list of documents/manuals/drawings that shall be provided to NSCD while handing over. Suggested training scheme, topics may also be included in this set.	1 Set	Submitted/Not Submitted	
xii.	Timeline/ Gantt Chart for execution of the entire work from the date of placement of order indicating therein parallel activities and critical path to establish completion of the entire work within the stipulated time schedule	1 Set	Submitted/Not Submitted	

xiii.	List and quantity of each spare that shall be provided by the bidder initially to fulfill onsite comprehensive warranty of three years. This shall also include quantity of spare light source with housing that will be supplied along with the projector/ projectors initially. All the tools, tackles, gadgets, devices that shall be required for measuring, operation, maintenance, testing etc. shall be included in this list and shall form part of the initial supply.	1 Set	Submitted/Not Submitted	
xiv.	List of films that are offered along with the project as per the Annexure-G1 format.	1 Set	Submitted/Not Submitted	

Signature of the Bidder / Constituted Attorney

Correction of Bank Details: -

There was some error in bank details as per Annexure H shared in the NIT document. The details are corrected and the revised (corrected) details as per Annexure H are attached for further reference.

ANNEXURE – H

BANK DETAILS(CORRECTED) OF NATIONAL COUNCIL OF SCIENCE MUSEUMS

Name of Bank : Indian Overseas Bank
Branch Address : GN 34/2, Sector V, Saltlake, Kolkata – 700091
SB A/c No. : 164201000000491
IFSC Code : IOBA0001642

NATIONAL COUNCIL OF SC SCIENCE MUSEUMS
33 Block GN, Sector-V, Bidhannagar
Kolkata-700091

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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							
Name of the Work: Supply, Installation, Integration, Testing and commissioning of 8 meter diameter Digital Planetarium (including hardware, software, content and all accessories) along with perforated dome at the proposed Planetarium at Village Shoghi, Anandpur, Shimla, Himachal Pradesh.							
Contact No.:							
Name of the Bidder / Bidding Firm/Company:							
PRICE SCHEDULE							
(This is just a format for the 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 accepted.)							
Sl. No.	Item Description	Qty	Units	Quoted Currency INR/Other than INR	Basic Rate	Custom Duty	GST
1	2	3	4		5	6	7
1.01	Supply, Installation, Integration, Testing and Commissioning of Digital Planetarium hardware & software packages, interfaces, requisite projector/s, audio system & acoustics, 8 meter diameter perforated aluminium standard tilted dome screen for seamless projection of high resolution, 4K native resolution, 2D digital dome film shows and planetarium shows at SSC Planetarium, Shimla, Himachal Pradesh. The amount here should match with that of Annexure - 'J' Cost Break-up.	1	Job	Other than INR			
				INR			
1.02	1 st year of Post warranty/DLP Comprehensive Annual Maintenance of entire facility (Payment to be made in half yearly post successful service)	1	Job	INR			
1.03	2 nd year of Post warranty/DLP Comprehensive Annual Maintenance of entire facility (Payment to be made in half yearly post successful service)	1	Job	INR			
1.04	Total Operation Charges during 1 st year	1	Job	INR			
1.05	Total Operation Charges during 2 nd year	1	Job	INR			
1.06	Total Operation Charges during 3 rd year	1	Job	INR			
1.07	Total Operation Charges during 4 th year	1	Job	INR			
1.08	Total Operation Charges during 5 th year	1	Job	INR			
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- J 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 sheets should match.
- D. Offline Financial Bid shall not be accepted under any circumstances.
- E. The sum of the total amounts quoted by the bidder against SI No. 1.01, 1.02 & 1.03 shall be considered to arrive at the lowest amount quoted in the financial bid however, the initial order will be placed for item No. 1.01 only.

Validate Print Help **Item Wise BoQ**

Tender Inviting Authority: National Council of Science Museums

ANNEXURE I

Name of Work: Supply, Installation, Integration, Testing and Commissioning (SITC) of Digital Planetarium and onsite comprehensive warranty (three years), post warranty comprehensive maintenance (two years) and operation of the equipments of the entire setup for 5 years post installation at Science Learning and Creativity Centre, Shimla, Himachal Pradesh

Contract No: I-18012/7/23(257)

Name of the Bidder/ Bidding Firm / Company :

PRICE SCHEDULE
(This BOQ template must not be modified/replaced by the bidder and the same should be updated after filling the relevent columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only)

NUMBER #	TEXT #	NUMBER #	TEXT #	TEXT #	NUMBER #	NUMBER	NUMBER	NUMBER	NUMBER	TEXT	TEXT	NUMBER	NUMBER #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	Quoted Currency (For Column M Only)	Total Amount Other than INR taken together as per Annexure J Cost Breakup (Exclusive of all duties & taxes in India) To be quoted as per the currency selected in Column L only.	Total Amount in INR taken together as per Annexure J Cost Breakup (Inclusive of all duties & taxes) To be quoted in INR Only	1st year of Post warranty/DLP Comprehensive Annual Maintenance of entire facility (Payment to be made in half yearly post successful service) (Inclusive of all duties & taxes) To be quoted in INR Only	2nd year of Post warranty/DLP Comprehensive Annual Maintenance of entire facility (Payment to be made in half yearly post successful service) (Inclusive of all duties & taxes) To be quoted in INR Only	Total Operation Charges during 1st year (Inclusive of all duties & taxes) To be quoted in INR Only	Total Operation Charges during 2nd year (Inclusive of all duties & taxes) To be quoted in INR Only	Total Operation Charges during 3rd year (Inclusive of all duties & taxes) To be quoted in INR Only	Total Operation Charges during 4th year (Inclusive of all duties & taxes) To be quoted in INR Only	Total Operation Charges during 5th year (Inclusive of all duties & taxes) To be quoted in INR Only	Total Amount including tax component as per Column M (Other than INR)	Total amount from Column N to Column AY) (IN INR)	TOTAL AMOUNT In Words
1	2	4	5	12	13	14	15	16	17	18	19	20	51	53	54	55
1	Bill of Quantity for HIMCOST, Shimla Project															
1.01	Supply, Installation, Integration, Testing and Commissioning (SITC) of Digital Planetarium and onsite comprehensive warranty (three years), post warranty comprehensive maintenance (two years) and operation of the equipments of the entire setup for 5 years post installation at Science Learning and Creativity Centre, Shimla, Himachal Pradesh	1.0000	Job	USD										0.0000	0.0000	USD Zero Only
Total in Figures														0.0000	0.0000	Zero Only
Quoted Rate in Words																