

**REGD. POST****Supply Order**

From

The Director General, Supplies & Disposals, Haryana,  
Bays No. 3-6, (2<sup>nd</sup> Floor), Sector-02, Panchkula  
E-mail: [supplies@hry.nic.in](mailto:supplies@hry.nic.in)

To

M/s Deep Sky Planetariums Private Limited,  
53 Syed Amir Ali Avenue, Shivam,  
Chamber Building, 3<sup>rd</sup> Floor,  
Kolkata, West Bengal-700019,  
Email:- [sevice@deepsky.co.in](mailto:sevice@deepsky.co.in),

Memo. No. 129/HR/E-4/2024-25/  
Dated Panchkula, the:-

**Subject:- Procurement of the New Projection System, Shows and Associated items required by the Haryana State Council for Science, Innovation and Technology, Panchkula.**

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With reference to your offer/BID No. 1257223 and your letter No. Nil dated 29.12.2025, this office acceptance letter No. 15116 dated 29.01.2026 & your letter No. Nil dated 11.02.2026, on the subject noted above.

2. Please supply the equipments/items and services offered by you in your technical bid within the delivery period in any case from the date of issue of order, the following material under the terms & conditions already accepted by you in the tender to the Consignee to be intimated by the The Secretary/EC, Haryana State Council for Science and Technology, Panchkula and for payment, the bill of the cost in triplicate be sent to the consignees for payment under advice to the this office.

Rates in Rs. of New Projection System, Shows and Associated items Inclusive of GST, FOR destination & Payment and other terms & conditions etc.			
SR. NO.	Name of firm	Quantity	Rates (In Rs.) per no. (Inc. of GST & other applicable taxes etc).
1.	M/s Deep Sky Planetariums, Kolkata	01 No.	Rs. 2,42,90,000/-
	Scope of Work Year wise charges inclusive of GST etc. for Onsite Comprehensive annual maintenance Contract (C.M.C) of the complete system along with additional computer and projector (After expiry of 5 years of purchase warranty).		
A	For 6 <sup>th</sup> Year		5,31,000.00
B	For 7 <sup>th</sup> Year		5,31,000.00
C	For 8 <sup>th</sup> Year		5,31,000.00

D	For 9 <sup>th</sup> Year	11,00,000.00
E	For 10 <sup>th</sup> Year	11,00,000.00

## REQUIRED MINIMUM TECHNICAL SPECIFICATIONS OF 2D DIGITAL IMMERSIVE PLANETARIUM PROJECTION SYSTEM

### 3.1 PROJECTORS:

- a. Below are the minimum specifications of the required equipments, however bidder may offer equipment with better/higher than the given below given specifications:

Sr. No.	Parameter	Remarks
1	No of Projectors required	Two or more projectors at the periphery of the dome.
2	Display Technology:	DLP/RGB
3	Minimum brightness	9500 ANSI Lumens or better
4	Static/Native contrast ratio	1000:1 or better
5	Native Resolution	3840 x 2,400 (4K UHD) / 2,716 x 1600 (WQXGA+ native) with signal processing at 60 Hz or better. (Bidder will upload detailed technical note and drawings to explain how pixels are counted and how the resolution is achieved in technical bid)
6	Light source and its life	Laser phosphor/SI, NXL® + optional IR LED Life : Minimum 20,000 hours or better.
7	Projector brands allowed	BARCO, Norxe, Digital Projection, Sony
8	Inputs	DP1.2, HDMI 2.0 , IR, RJ45, USB or better
9	Operating Temperature	10 °C to 35 °C or better 20% to 80% (no condensation) or better
10	Power Requirements	200-240V, 60 Hz
11	Fish eye Lens	"Lens should be professional grade, lenses should be specifically designed for multiple projector configurations on dome screen, should have adequate illumination and low distortion at the edges of the image projected on dome. Appropriate lens to use minimum projection space possible. Bidder to mention in Technical bid number of Fish eye lenses to be used and give price in the financial bid. In order to get better picture there should be facility of physical masking with the projector. Bidder to quote charges for the complete setup to be used for physical masking in financial bid.
12	Other Features required	Efficient cooling design, Embedded warp & blend engine, Geometric correction, heavy duty capable of continuous 24X7 operation etc.
13	Blending	With Vertical and Horizontal edge blending support
14	Accessories	Mounting structure to be supplied and installed for mounting and supporting, IR Remote, power cord etc.
15	Input Signal compatibility	Upto 120 Hz frame sequential input for resolutions varying from VGA to WQXGA

		(2,716 x 1600). For 2D: 4K@60 Hz.
16	Synchronization	Frame-lock synchronization support to synchronize between multiple projectors to ensure perfect hardware assisted synchronization, 3D sync signal out for synchronization of 3D glasses.
17	Colour adjustment options	Ability to individually adjust actual RGB channels for accurate colour matching within individual projectors. Should produce true colour representation across multi-projection display for a completely uniform edge-blended image.
18	3D-enabled	Projectors should have option to run in active 3D mode (if required in future).
19	Projector location	At periphery of the dome

- b) The system needs to be capable of projecting full dome shows in 2D and if required system should be capable for active 3D projection.
- c) Anaglyph and linear polarization methods for 3D projection are not accepted. Color purity and clarity need to be given more importance.

**3.2 a) Auto Blending and Geometry Correction (BG) unit:**

The system must be equipped with software and hardware to provide multi projector auto geometric alignment, edge & colour blending and brightness matching to ensure that the projection looks as seamless as possible. Projectors functions should be able to control through the software. The specifications and functionalities of this unit are as below:

Specifications	Detailed description
Image operations	Auto Geometry Correction
	Auto Edge Blending
	Auto Colour Correction and Matching
	Auto brightness Correction and Matching
	Gama Matching of Projectors
Software presets	The system must have software and hardware to adjust and calibrate the geometric auto alignment and auto edge blending of the digital projection system automatically

**3.3 COMPUTER HARDWARE SYSTEM:**

a) All the Hardware should be of reputed brand (with heavy duty components for professional use), specifically designed for handling heavy duty planetarium Active 3D (if required in future) & 2D digital 4K(UHD) full dome graphics projection use so as to be able to run 24 X 7. Sub-standard hardware is not acceptable. System should consist of minimum number of computer system(s). Computer system should be well capable of handling heavy graphics related to running active 3D & 2D full dome shows without any jerks, 5.1 surround sound dolby audio and accessories available at KCMP. Computer system(s) should well support jerk-free/smooth synchronization between the displays from the projectors for seamless display on dome screen. Industrial grade computer(s) with latest graphic card(s), Intel based processor(s), solid state hard drives, all necessary hardware and software suitable for planetarium systems of International Standards of latest make year and month having following minimum specifications:

- i) 8 Core Intel Xeon or Higher processor.  
Working memory should be minimum 16 GB X 2 RAM or more compatible with Graphic card.
- ii) Dual Port Nvidia Self Powered type Graphic card with minimum 16 Gb GPU memory or more. The graphic card must ensure the synchronization of all video channels that make up a common overall image on the dome

so that all images are displayed synchronously. The areas of overlapping images from individual projectors (so-called blending) must be invisible to viewers.

- iii) Seagate hard drives with 2TB capacity
- v) Additional SSD and RAMs may be configured to meet the overall specifications, if necessary.
- vi) Computer with monitor, backlit-keyboard, mouse & other accessories to be mounted in a single Console glazed cabinet.
- vii) No jerks/flickers or image tearing should appear on the screen.
- viii) Operating system: Microsoft Windows 11(64bit)/Linux or higher.
- ix) Integrated or added Audio card for 5.1 surround sound Dolby audio system to support.
- x) Integrated Display Card to support monitor display.
- xi) Heavy duty ASUS or equivalent branded Motherboard.
- xii) Other Accessories: Backlit keyboard & Mouse, cables and connectors.
- xiii) The computer hardware & software are to be operated in latest Microsoft Windows/Linux platform with upward compatibility. All internal wiring (both power and data) works are to be arranged by the bidder. The wiring should be as per relevant standards.

**3.4 USER INTERFACE:** Primarily there should be option to operate computers to run shows, sky-simulation software, geometric correction etc. using handheld computer like tablet-pc. Apart from this there should also be option to operate computer (if required for maintenance etc.) in desktop mode. So, there should be provision of handheld computer like tablet-pc pre-loaded with all applications controls and with connectivity with main desktop computer. Bidders are required to quote the specifications of the tablet-pc along with networking accessories required for connectivity with main desktop computer.

### **3.5 SOFTWARE:**

- a) **Full dome shows player software** to play 2D full dome shows smoothly, should be able to control the show settings, should have common commands like Play, Pause, stop etc., jump to particular time in the show etc.
- b) **Sky Simulation Software:** Sky simulation software available for use in planetaria with as many features as possible from following:
  - i) **Earth & Moon System Features:** High Resolution Earth & Moon Map, moons of Planets as per selected options.
  - ii) Shadow to represent eclipses,
  - iii) Earth orbiting Satellites for Navigation and mapping, etc.
  - iv) High-definition textures, Atmospheric effects, high end simulation, lighting and shadow, particle management etc. features.
  - v) Interactive dome view with good resource manager and functions such as drag & drop, drag & Fly, Picking etc.
  - vi) **Constellations & Grids:** 88 constellations, stick figures, possibility to add arbitrary a overlays, I.A.U boundaries for 12000
  - vii) **Co-ordinate spheres** for celestial, ecliptic and galactic systems, Meridian, Equator, Cardinal Points.
  - viii) **Solar System:** Sun, Planets including their Moons, Minor Orbital Objects including Asteroids, Outer Solar System Objects, comets, Oort Cloud, Kuiper belt etc.
  - ix) **Space Missions:** Cassini, Voyager & Voyager2, latest Mars missions, Pioneer, International Space Station, important Indian Spacecrafts and space missions.
  - x) **Milky way Galaxy:** Hipparchus Star Catalog, Extra solar Planets, Open Star Clusters, Globular Star Clusters, Pulsars, Quasars, Planetary Nebulae, H II Regions, Supernova Remnants etc.



- xi) Extragalactic Space: Tully Galaxies (NGC, JC, 30,000 objects), 110 Messier Objects, Abell Galaxy Cluster, Deep Field Survey Objects, Sloan Digital Sky survey (SDSS).
  - xii) Provision for viewing the Earth, Solar system & Milky Way galaxy from far away points.
  - xiii) Provision of showing coordinates and labels of any celestial objects.
  - xiv) Should show sky of any time and location from earth or any other planet.
  - xv) Should be able to project the sky onto dome in real-time using Live feature.
  - xvi) Library of images, clippings, visuals, animation on space and astronomy related objects and events.
- 3.6 **LED Cove lighting:** LED strip lighting to be installed inside the peripheral cove area for purpose of sufficiently illuminating the theatre during Entry, Seating, Movement and Exit of the public. There should be provision of Lighting control through DMX. The lighting should be with 7 years of life and 5 years of comprehensive warranty.

### 3.7 SURROUND SOUND 5.1 AUDIO SYSTEM:

The Selected bidder must supply a digital sound system compliant with 5.1 configurations. It must be fully integrated in the theatre and fully controllable from the Control Software. Audio and video must have a perfect synchronization. Audio system must be able to play any type of WAV files format, any AC3 files format or other such formats. Minimum hardware specifications are below:

Make: JBL/HARMAN, BOSE, Sony, AKG, Yamaha or equivalent shall be an integrated part of the overall system.

It must be composed of minimum:

- 1 wireless handheld microphone
- 2 wireless headsets microphones
- 1 Digital Signal Processor with minimum 12 analog audio input and 8 analog output,  
should be controllable through a software program interface from operator PC.
- 5 Speakers for Front L-R, Centre, Rear, surround speakers' channels with minimum of 80 to 150 W Peak Power.
- surround speakers to cover entire seating area with minimum 100 to 200 W continuous power handling.
- One between 200 to 300 Watt peak power subwoofers
- Power Amplifiers: between 100 to 200 Watt RMS@ 4ohms per channel or better,  
Quantity: 5  
1 no. Of Power Amplifier for sub-woofer: 200 to 500 Watt per channel @ 4 ohms RMS.

3.8 **LCD Projector:** Existing NEC LCD projector, to be connected with the system.

3.9 **Power backup for the Projection System :** It is required that the planetarium show should be able to run for at least 30 to 40 minutes in absence of electrical power supply, for this purpose a 15 KVA Online 3 phase UPS is available at planetarium for providing the power backup to whole projection system. If this UPS is not sufficient for providing the required power backup to the new projection system being quoted by the bidders, then bidders are required to propose power backup solution suitable for the projection system.

## 4. SCOPE OF WORK

### 4.1 NEW DIGITAL PROJECTION SYSTEM AND ASSOCIATED WORKS:

- a) Installation of new digital projection system [which includes digital projectors], projection computer hardware i.e. handheld tablet-pc for operator's interface, computer for user interface and graphic handling, full dome show player, sky simulation software, accessories, wirings etc. for seamless unidirectional projection of full dome 2D shows in 4K(UHD) as per minimum or better hardware and software defined in this document. Testing, commissioning, running of the whole system, dome screen cleaning, playing of existing two shows, 5.1 audio system, providing LED Cove light, providing 2d full dome shows in 4k(UHD) resolution (free with system) after dubbing in Hindi as per titles shortlisted by HSCSI&T, staff training, (Complete system with 5 years onsite Comprehensive purchase warranty/Defect Liability period starting from the date of handover of the complete system). The purchase warranty should include maintenance and replacement of faulty parts and/or software updates with new ones of equivalent brand, performance and specifications.
- b) The system needs to be capable of projecting full dome shows in 2D in 4K(UHD) resolution.
- c) If any disparity in terms of projector intensity, colour, alignment or otherwise is noticed and reported during the warranty period, immediate re-addressal of the issue through replacement shall be within the scope of the supplier.
- d) Data cabling using fiber optic cables and high-speed switches to carry loss-less video signals from source computer(s) to the projectors.
- e) Properly dressed power and data cabling for all systems and devices so as not to cause interference with video signals and data networks.
- f) The digital projector model offered should be of latest make with life time and availability of spares for minimum 7 years starting from the date of handover of equipments and associated components to KCMP. The bidder shall give the make, model, specifications and Date of Manufacture of the projector. The projectors should be of current year latest make.
- g) Selected Bidder shall upload complete functional drawings related to installation, wirings, connections and operator console & projector's location in the dome.
- h) Apart from physical diagnosis at KCMP onsite, supplier shall also provide relevant software maintenance releases and updates/anti-virus patches and will also provide the 24X7 telephonic/remote desk top support to KCMP through the installation of the maintenance release/update/troubleshooting and fault resolution of systems from time to time.
- i) The system should be designed keeping in view that it must be manageable from a single computer console (through tablet-pc as well as through desktop screen when required). All accessories needed for easy accessibility of devices for maintenance must be considered under the scope of the work. Components like Computers CPUs, audio amplifiers etc. to be arranged properly in closed cabinets, with cables labeled and arranged to prevent exposure to dust and for safety.
- j) Bidder to mention in their technical proposal that how they will achieve the required display resolution on dome after geometric correction (as per the native resolution of the projectors offered).
- k) Special mounting for the projector and all required alignments for final adjustments etc. shall remain within the scope of the supplier. The supplier must consider cost effective non rusting materials and anti-corrosive treatment for metallic structure of projector. All safety measures shall be considered while designing for safety of people and equipment. The supplier shall remain responsible for closely monitoring the work at site to ensure that desired quality of work is executed.

- l) The design for all systems should be forward looking and should allow for future upgradation and development within the systems currently proposed and provided. The proposed design should be of open architecture to allow for future upgradation.
- m) Bidder shall arrange for installation of projector in such way that it should be in-line with the dome ambience and should not obstruct audience's view. Bidder shall also drawings showing the exact position of the projector in the dome and how the projector will be fixed.
- n) This work also includes making the two shows titled "Oasis in Space" and "Astronaut" (both Hindi and English language versions) compatible to run on the new projection system.
- o) Bidders are also required to upload Networking and data cabling schematic layout.
- p) During installation and commissioning of the equipment, bidder shall arrange all tools and tackles, ladders, scaffoldings etc. Tools, tackles, scaffoldings, cleaning materials, labour personnel etc. shall not be provided by the HSCSI&T/KCMP.
- q) Site Supervision, Set Up, Testing and Commissioning, Training, Planned Maintenance Services, Audio Visual System Management etc. shall all be under the scope of the work of the bidder.

**4.2 LED Cove lighting:** LED Cove lighting with DMX controls to be installed inside the peripheral cove area for purpose of sufficiently illuminating the theatre during Entry, Seating, Movement and Exit of the public. The lighting should be with 7 years of life and 5 years of comprehensive warranty.

**4.3 (5.1 AUDIO) SURROUND SOUND AUDIO SYSTEM:**

- a) It shall be fully controlled through DMX Control System and shall address the requirements of full dome projection environment to ensure maximum immersive experience, as per specification given in this tender document.
- b) Warranty of the audio system should be 5 years starting from date of billing. The minimum life, availability of technical support and spares for the audio system should be 7 years from the date of receipt of equipment at KCMP.
- c) There should be testing facility for workability of all the audio channels through software on daily basis.
- d) Specifications of the audio system are given under Clause No. 3.7. Bidders to give detailed specifications of complete audio system being offered in the Technical bid and give prices in the Financial bid envelope.

**4.4 MODIFICATIONS/CIVIL WORKS ARISING DUE TO INSTALLATION OF NEW POJECTION SYSTEM IF REQUIRED, THEN HAS TO BE MADE BY THE FIRM:**

Agencies were already intimated through advertisement in Hindustan Times (National Edition) Newspaper published on dated: 06.08.2024, to visit KCMP at Kurukshetra in order to assess modifications/civil works (if any) required for installation and commissioning new projection system in dome. However for the agencies who have not visited may visit KCMP before applying in tender on any working day for assessment of the existing infrastructure and in case any civil works are required, details of the same shall be uploaded in the **Technical bid** envelope and corresponding price in the **Financial bid** envelope. No clarifications and amendments regarding the tender document shall be accepted from the agencies applying in tender.

**4.5 USER TRAINING FOR OPERATION, MAINTENANCE OF THE SYSTEM AND USE OF PLANETARIUM SOFTWARE APPLICATIONS ETC.**

- a) Hands on training of the KCMP staff shall begin right from the installation of the system.
- b) The supplier has to train KCMP staff members in operation of shows, system day to day maintenance and upkeep, computer software and hardware maintenance, O.S crash recovery, regarding various time to time system software and application software, anti-virus updates. Training must include operation and periodic maintenance of projectors like cleaning, calibration of their geometric alignment, brightness uniformity, Fish eye lens placement and focusing, periodic cleaning, audio checking and testing, use of various software like use of sky simulation s/w features to generate sky, celestial objects and phenomena, full dome player and its practical use and demo for viewers. Training on general and specific maintenance of 5.1 audio system etc.
- c) 4.6 USER INTERFACE: Primarily the system operation shall be through handheld tablet pc. Apart from this there should also be option to operate computer in desktop mode (if required for maintenance etc.). There is requirement of tablet-pc pre-loaded with all applications controls and with connectivity with the main computer system. Bidders are required to quote the specifications of the tablet-pc along with networking accessories required for connectivity with main computer in Technical bid and give corresponding prices in the financial bid.

#### 4.7 FULL DOME SHOWS:

- a) Full dome shows in 4K (UHD) resolution, with time duration of 20 to 30 minutes, with free perpetual license to exhibit at KCMP along with the projection system being offered. The shows should be on the topics related to Astronomy like Constellations, Night sky watching, different Celestial events, telescopes, space exploration and other topics related to space science and similar content which are suitable for interest to Indian viewers of all age groups. List of free 2D shows with details like license information, show title, duration, audience type (age group), name of show producer, date of release, online links for viewing these shows, documentary proofs related to free distribution, exhibition and editing the narration language of these shows etc. The selected bidder shall do dubbing of the shows shortlisted by HSCSI&T in Hindi language.
- b) For shows to be supplied, the Supplier shall make the show video format as per full dome 4K(UHD) resolution for 2D shows, audio format as per 5.1 surround sound audio, visually sharp and compatible with the new digital system being offered in this tender.
- c) Language of shows should be Hindi. All full dome shows must be with 5.1 Dolby digital surround sound formats and with the optimum display resolution of the projection system being supplied. Bidders shall not offer shows with content which has become obsolete scientifically. For example: Showing "Pluto" as one of the nine planets is presentation of obsolete content because it is placed under the category of dwarf planets now.
- d) Selected Bidder for award of contract shall deliver the ordered shows at KCMP maximum within time duration as given under clause no: 2.14(b). The delivery period, which will be reckoned from the date of the award, will be guaranteed under penalty as in Clause No.2.17.
- e) Selected Bidder for award of contract shall provide shows in English and Hindi languages. After award of work, selected bidder shall firstly provide sample video clips of the show for approval of the voice sample of the artist from HSCSI&T. In case if the voice of Artist doing narration in Hindi language, show quality etc. is not found suitable by the HSCSI&T, the selected bidder shall do correction/replacement of voice artist and has to again get the new sample approved until found satisfactory by the HSCSI&T. After final approval of show sample from the HSCSI&T, only then supplier shall proceed for supply, test and run the full and final show at KCMP. This all has to be done within the time as

specified under clause 4.7 (d) above. In case of delay penalty shall be imposed as per Clause No.2.17.

- f) Selected bidder should upload an undertaking in the technical bid envelope that all 2D shows offered in this tender are free for exhibition at KCMP for at least a period of 10 years starting from the date of handover of the shows to KCMP. Selected bidder should also undertake that in case of any copyright claim, legal notice and/or litigations, bidder/supplier shall be solely responsible to attend the same and supplier will reply to such notices/attend legal proceedings of such notices/litigations and/or pay compensations/penalties imposed as a result of court/statutory authority's orders initiated against DS&D/HSCSI&T.

#### **4.8 CLEANING OF PERFORATED ALUMINIUM DOME SCREEN:-**

- a) Site preparation: KCMP will remove all existing equipments, chairs, carpet etc. Selected bidder to whom work is allocated will cover the installations like wall panels, wooden doors etc. with plastic sheets to prevent exposure to dust etc. Should remove the existing silica wool insulation sheets from rear of the aluminum dome panels. Selected Bidder will arrange for all tools, tackles, moveable scaffoldings, platforms, ladders, cleaning materials etc. required for the work at its expense. Selected Bidder shall deploy skilled/un-skilled labor worker firstly to do cleaning of the peripheral maintenance gallery floor and walls by brooming, dusting, vacuum cleaning and wet moping in order to make the whole area completely dust free. There should be no damage to interior of the dome like wall panels, fasteners grouted in floor for holding chairs, wooden work etc. due to scaffolding movement or other activities involved in the dome screen cleaning work. In case of any damage or loss to HSCSI&T/KCMP same shall be recovered from the selected bidder or corrected by the selected bidder at his own cost.
- b) Thorough vacuum dry suction cleaning of dome screen from rear (upside surface) and front (inside surface) of the panels. Wet cleaning with non-reactive soft liquid solution from inside and outside/upside to make it completely dust free. Drying up the wet/moist panels completely. Replacement of insulation silica wool pads with acoustic poly-synth material and acoustical tissue/fabric in rear of the dome. The cloth used for cleaning should be very soft, free from fur/tomentums. Cleaning work should be carried out with utmost care and safety of dome screen, dome floor, other items as well as personnel doing cleaning.
- c) All the waste materials like existing silica wool sheets, dust, waste water/solutions & other materials used for cleaning need to be discarded safely after completion of the work at suitable place in consultation of the KCMP. The floor area, internal peripheral walls etc. also need to be cleaned thoroughly after completion of the work.
- d) In case of rusting, iron parts of dome frame need to painted. KCMP shall provide electrical connection, lighting, water supply and storage space only for belongings of the selected bidder. Loss due to damage to the dome screen, dome floor, fasteners grouted on floor etc. during cleaning of screen shall have to be fulfilled/restored by the supplier at his own expenses. During dome screen cleaning, in case of any problem in the screen surface reflectivity or depletion in the screen reflectivity then the required or formation of any kind of patches like bird-cage effect etc. due to reaction of chemical/solutions or marks affecting the picture quality, selected supplier shall remove such faults at his expense. In case

of acoustic treatment done is not satisfactory and material of the poly-synth sheet is not satisfactory, the bidder shall rectify/replace the same immediately. The paint coating on the aluminum perforated screen should not be damaged due to cleaning on any condition.

**4.10 ADDITIONAL COMPUTER HARDWARE & SOFTWARE:**

- a) One additional projector as backup with specifications similar to that of primary projectors to be used for projection, pre-configured so that it could replace the faulty projector (if required), plugged and played to avoid disruption of shows. Supplier to ensure that this projector should be used in rotation from time to time by replacing one of the primary projectors.
- b) One additional CPU of the computer ready to be used as main desktop computer for graphic handing for projector(s) (with NVIDIA display card fitted) completely configured with same hardware and software, drivers etc. ready to plug and play needs to be provided as backup, so that it could be used in case of fault in the primary computer to avoid disruption of shows for public. Bidder to use the additional CPU in rotation b replacing with primary CPU.
- c) The additional computer system and projector should be of same quality, brand, features and performance as of Primary Computer system/Projector. Bidders are required to quote prices of additional computer CPU and projector along with accessories to be used as backup in Financial bid envelope.
- d) Additional Computer Hardware/Software should also be with minimum comprehensive onsite purchase warranty of 5 years & life of 7 years and bidder should also cover it under the Comprehensive Maintenance Contract (as given under clause no: 4.9 above).

**4.10 List of 10 shows selected by Indenting Council:-**

Sr. No.	Show Title	Duration
1.	From Earth to the Universe	31 min. 40 sec.
2.	The Hot and Energetic Universe	29 min 38 sec
3.	Out There : The Quest for Extra Solar Worlds	30 min 27 secs
4.	SEEING	26 min 35 sec
5.	Sunstruck	20 min 58 sec
6.	Two Small Pieces of Glass	22 min 45 sec
7.	Mars	25 min 40 sec
8.	Phantom of the Universe	27 min 29 sec
9.	Solar Quest	11 min 52 sec
10.	Journey to the Centre of Milky way	6 min 43 sec

Note:-The bidder shall carry out work related to finalization of voice artist, dubbing of shows from English to Hindi language etc. as specified in tender document terms and conditions.

4.11.- One Special Show on ISRO to be provided at no cost with its English and Hindi dubbing.

## OTHERS TERMS & CONDITIONS:-

1. GST :- Inclusive in above rates.
2. Freight Charges :- Inclusive in above rates.
3. Delivery & Time of Completion:
  - a) Hardware/Software/other equipments: Delivery period will be reckoned from the date of issue of award letter. Supplier/Bidder selected for award of contract shall deliver the ordered equipments, software, shows etc. at KCMP maximum within 150 days from the date of award of the contract. The delivery period, which will be reckoned from the date of the award, will be guaranteed under penalty as in Clause No.2.17 of DNIT.
  - b) After receipt of the materials/equipments like hardware, software etc. as per above clause, the supplier/bidder selected for award of contract shall complete all the works/provide required services mentioned under "Scope of Work" and complete installation, commissioning, testing, user training, dome screen cleaning and all other associated works up to the satisfaction of the HSCSI&T and shall handover the system to HSCSI&T in compliance of this tender's terms and conditions maximum within 180 days from the date of award of contract to the supplier. In case of delay/non-compliance, penalty clause shall be applicable as per Clause No.2.17 of DNIT.
  - c) Every effort should be made to complete the entire work by the successful bidder within the specified time. In case the successful bidder fails to comply with the specified time schedule as per the approved time schedule (as per above clauses) and accepted terms and conditions, and where the progress of work is not found satisfactory, and commensurate with the expected progress DS&D reserves the right to cancel the order. The decision of DS&D in this regard shall be final and binding on the successful bidder. The successful bidder cannot claim any compensation for such cancellation of contract.
4. PAYMENT TERMS:
  - a) All the payments related to this contract shall be released in Indian currency to the bidder.
  - b) All prices quoted are F.O.R Kalpana Chawla Memorial Planetarium (KCMP) at Kurukshetra and inclusive of packing and forwarding, handling charges to cover the transport to site, insurance and other legally permissible duties and levies like custom duties, skilled/un-skilled manpower charges etc. wherever applicable. No separate charges shall be paid for such expenses.
  - c) Payment shall be made to the supplier through bank transfer (NEFT/RTGS) after satisfactory completion of works, delivery of services required (as given in the contract agreement), handover of complete system, successful operation & after receipt of proper bills. Taxes as applicable shall be deducted at source.
  - d) It is the responsibility of the Bidder to inform himself of the correct rates of duties and taxes applicable on the materials at the time of bidding. Bidder shall also keep DS&D indemnified regarding effective rates of duties; taxes applicable on various items being quoted and if required shall also provide copies of Govt. instructions in support of the same.
  - e) Any variation up or down in statutory levy or new levies introduced after signing of the contract under this tender & within the delivery schedule will be to the bidder's account.

- f) For Projection System (includes Projectors, lenses, computer system, Audio, lighting, Dome Cleaning, accessories, consumables etc.) the payment terms shall be as below:
- i. 60% payment of the total value of work order within 30 days after the receipt and acceptance of all equipments like projectors, computer hardware, 5.1 audio system, LED Cove lighting & software, consumables, manuals/drawings, spares/additional hardware etc. all in good condition as specified in the work order.
  - ii. Remaining 40% payment of the total value of work order within 30 days after satisfactory completion of dome screen cleaning, replacement of silicon insulation sheets with acoustic poly-synth material, successful installation, commissioning, testing, running and handover of all projection system equipments along with their accessories (like computer hardware & Software, including additional computer hardware & software, successful dubbing and running of free shows, satisfactory running of present two shows named "Oasis in Space & Astronaut, 5.1 audio installation & commissioning, Cove LED lighting, user training etc.), after one month of satisfactory & successful operation of the whole system (starting date of one month of operation of the whole system shall be reckoned from the date of handover of the complete system to "HSCSI&T").
- g) For dubbing/editing Shows Payment Terms shall be : 100% payment of the supplier for dubbing of shortlisted free shows in Hindi language and other permissible editing shall be released after 30 days of running of these shows (after dubbing) on new system supplied satisfactorily at KCMP, Kurukshetra. Starting date of one month of running period shall be reckoned from the date of handover of the complete projection system (with shows) to Council.

##### **5. COMPREHENSIVE ON-SITE MAINTENANCE CONTRACT (C.M.C):-**

- a) After the expiry of five years of Comprehensive onsite purchase warranty of the projection system components like equipments, lighting, software etc. HSCSI&T may at its discretion go for Onsite Comprehensive Maintenance Contract. However, HSCSI&T may or may not give order for C.M.C to the bidder. If the services of the bidder during the C.M.C period are up to the satisfaction of HSCSI&T, then HSCSI&T may extend the C.M.C. award year after year successively. The HSCSI&T reserves the right to award or not award C.M.C. to the bidder. C.M.C shall cover all the equipments like projectors, computer system hardware, cove lights, audio, software, Additional projector, Computer Hardware and related accessories.
- b) There shall be no advance payment in case of C.M.C. Payment in case of C.M.C. shall be biannual after the expiry of every six months and subject to the satisfactory services of the agency. Payment shall be in Indian currency.
- c) During C.M.C bidder shall provide on-site comprehensive support at KCMP. The CMC shall include preventive maintenance, replacement and/or repair of faulty parts of all the equipments, software troubleshooting/upgradation etc.
- d) Apart from the system incident faults, C.M.C. should have at least one fixed maintenance sessions annually in which bidder will depute their engineer to inspect the equipment, software etc. During this check bidders engineer will repair, fine tune, clean, re-install, correct, update/upgrade etc. the equipment and/or software functions etc.

- e) It shall be the responsibility of the supplier to keep the KCMP's staff updated regarding various maintenance procedures from time to time and regarding the updates of various software applications and hardware upgrades.
- f) The parts replaced should be of equivalent brand, performance and functionality.
- g) All replaced parts shall remain as property of HSCSI&T, Faulty parts shall be the property of supplier. All the parts including networking cables, connectors, etc. that may be required to maintain the system shall be supplied by the supplier at their own cost.
- h) The supplier will maintain the minimum essential spares at their own stores and the required tools / test equipment / software so as to reduce the break-down time.
- i) However, all round efforts must be made to set right the system in shortest possible time. Service shall be available for at all times for 365 days in a year. In case of delay in providing the services under CMC, penalty shall be applicable as per clause no: 2.17.

**6. DEFECT LIABILITY/ONSITE COMPREHENSIVE WARRANTY PERIOD:-**

- a) The Defect Liability/Onsite Comprehensive Warranty Period shall be five years onsite starting from the date of completion of satisfactory installation, commissioning, and handover of the complete system along with shows (Projectors, Computer Hardware/Software, Audio, cove lights & associated items/works etc.). The supplier shall provide Single Window Onsite Comprehensive Warranty support. The supplier shall be responsible for all defects of the installed equipment, manufacturing or other defects of components, maintenance and updating/upgrading of associated software, supply of all components, consumables, services etc. for a period of five years. The supplier, shall at his own cost, rectify the defects and/or replace the defective parts/equipment, up to the complete satisfaction of HSCSI&T within time defined in this document. The selected bidder will maintain the all-essential spares at their own stores and the required tools / test equipment / software so as to reduce the break-down time. This comprehensive warranty period shall also include preventive maintenance of the equipments supplied, for which the supplier shall carry out preventive maintenance by sending their technical experts to KCMP at least once in a year.
- b) All replaced parts shall remain as property of HSCSI&T, all faulty parts shall be taken back by the supplier. All the auxiliary parts including consumables, networking cables, connectors, etc. that may be required to maintain the system shall be supplied by the bidder at their own cost.
- c) By agreeing to this tender's terms and conditions the Supplier/Bidder selected for award of contract, warrants that the materials/equipment/software supplied under the Contract are new/of latest version, unused, of the most recent or current models and those they incorporate all recent improvements in design and materials unless provided otherwise in the Contract. The supplier further warrants that all Materials/equipment/software etc. supplied under this Contract will have no defect, arising from a design and /or materials as required by the DS&D specifications or from any act of omission of the Supplier that may develop under normal use of the supplied Materials/equipment.
- d) All the equipment/material will be of the best class and will be capable of satisfactory operation in the tropics without distortion or deterioration. No welding filling or plugging of defective parts will be permitted, unless

- otherwise specified, they will conform to the requirements of the appropriate Indian Standards.
- e) Selected Supplier shall also provide specific tools, tackles, consumables, spares, software applications, software/antivirus updates and their periodic implementation etc. to KCMP required for periodic basic maintenance & up keep of the system during warranty period.
  - f) All safety measures shall be considered while designing for safety of people and equipment. The selected bidder shall remain responsible for closely monitoring the work at site to ensure that desired quality of work is executed.
  - g) Selected bidder shall also provide 24X7 technical support through various means like telephonic, email, remote desktop and through person regarding the maintenance of the system depending on the severity of the fault throughout the week. The Selected bidder shall also mention their Telephonic and email support number/numbers in technical bid.
  - h) During the warranty/CMC periods after registering of fault occurred in the system by KCMP, the Supplier shall respond immediately for fault diagnosis (through telephonic/email/remote desktop support/by sending expert person) without delay after registration of complaint. If after reporting the fault/problem to the supplier, the breakdown exceeds 48 hours in any case, the warranty period of the faulty equipment/software will be extended, the time period of extension of warranty starting from the hour when fault was reported to the supplier and shall continues till the fault is resolved and system is made functional by the supplier. In case of breakdown beyond 48 hours (starting from the 49th hour of breakdown) apart from extension of the warranty period, penalty @ Rs.1335/- per show not run shall also be imposed taking maximum 5 shows per day (excluding planetarium holidays), to compensate the financial loss to the HSCSI&T and inconvenience caused to the visitors. Penalty shall be recovered from the payments due to the supplier and/or from its security deposit/bank guaranty. The amount of penalty shall vary from time to time as per ticket rates applicable and average visitor footfall of last one year. However, all round efforts must be made to set right the system in shortest possible time. Service shall be available for at all times for 365 days in a year.
  - i) The Bidder selected for award of contract shall indemnify and keep the KCMP indemnified regarding the safe operation and general maintenance/handling of the equipment from time to time.
  - j) Council shall take over the digital projection system only after successful dome cleaning, installation, commissioning, testing of the whole projection system along with shows, providing operation and maintenance manuals/product catalogues, drawings, warranty/guaranty documents, shows, additional hardware/spares, tools/tackles (if any), removing of scaffoldings, waste materials, training of KCMP staff, fault free running of whole system and shows supplied.
  - k) The selected bidder will maintain the essential spares at their own stores and the required tools / test equipment / software so as to reduce the break-down time. 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 HSCSI&T stating appropriate reason and justification.

#### **7. PATENT RIGHTS AND ROYALTIES:**

- a) The selected bidder shall indemnify the DS&D against all third-party claims of infringement of patent, copyrights, royalties, trademarks or industrial design rights arising from use of the goods, drawing or any part thereof.

- b) The selected bidder will declare and guarantees that all copyrights and author's rights etc. of all third parties shall be duly purchased and obtained and the royalties paid and by this agreement these rights of third parties, unencumbered in any respect, shall be transferred to DS&D. No such right would be only for one time use specifically for this job. If, however, any dispute of claim preferred by the third parties arises, Agency shall indemnify the DS&D against any such claim whatsoever.
- c) The selected bidder hereby agrees that no claim whatsoever shall be made against the DS&D and/or HSCSI&T in respect of any proprietary rights on the part of any other party relating to the plans, designs, models, drawings, photographs, scripts, free shows or any other such items, which they have used in the display of the work. The Agency shall indemnify the DS&D of all costs and expenses, which may have called upon to do so against such claims.

**8. INSURANCE IN RESPECT OF DAMAGE TO PERSONS AND PROPERTY:**

- a) The selected bidder shall be responsible for all injury to persons, animals or things, and for all structural and decorative damage to property which may arise from the operation or neglect of himself or of any nominated employees, whether such injury or damage arises from carelessness, accident or any other cause whatever in any way connected with the carrying out of his contract. This clause shall be held to include inter-alia any damage to buildings, electrical work, whether immediately adjacent or otherwise, and any damage to roads, street, footpaths, bridges or ways as well as all damages caused to the buildings and works forming the subject of this contract by inclement weather.
  - b) The selected bidder shall indemnify DS&D and/or HSCSI&T and hold it harmless in respect of all and any expenses arising from any such injury or damage to person or property as aforesaid and also in respect of any claim made in respect of injury or damage under any Act of Government or otherwise and also in respect of any award of compensation or damages consequent upon such claim.
  - c) The selected bidder shall reinstate all damages so as to deliver the whole of the contract work complete and perfect in every respect and so as to make good or otherwise satisfy all claims for damage to the property of third parties.
  - d) The selected bidder shall indemnify the DS&D against all claims which may be made against the DS&D by any member of the public or other third party or any employee of the bidder/supplier or its subcontractor in respect of anything which may arise in respect of the work or in consequence thereof and shall at his own expense arrange to effect and maintain, until the completion of the contract, a Policy of Insurance against such risks may be purchased by selected bidder for this contract.
  - e) The DS&D shall be at liberty and is hereby empowered to deduct the cost of any damage, compensation, costs, charges and expenses arising or accruing from or in respect of any such claim or damage from any sum or sums due to or become due to the supplier.
9. The selected bidder shall be responsible for proper co-ordination with KCMP and continuous supervision of all the works at site to ensure the desired quality of workmanship and use of specified materials and to achieve the end result.

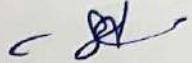
10. **Inspection**:- After receipt of the equipments, software etc. at KCMP the bidder shall provide list of the items in triplicate containing item names, specifications like brand, model, year of manufacture, accessories, manuals/guides etc. and shall give adequate time to HSCSI&T's technical committee to inspect the items in the consignment. Unpacking/Unsealing of packages shall be done in presence of said committee. Every package should be properly labeled showing full details of item. Any/all defective items pointed out to the supplier by the said committee during such inspection shall be promptly replaced with new item at the cost (including material, transportation etc. all costs) of the supplier to meet the desired quality and performance as per requirement of KCMP failing which penal action shall be taken as deemed fit by DS&D. The decision of DS&D in this regard shall be final and binding on the successful bidder.
11. **Penalty** : If the bidder, after accepting the Purchase Order, fails/delays to deliver dome cleaning services up to satisfaction of HSCSI&T and/or fails/delays to successfully make the whole projection equipments (including shows) operational and fails/delays to provide necessary manuals/documents/catalogues/warranty related documents, additional hardware etc. as stipulated in this tender document, within the period specified in this document, DS&D shall, without prejudice to its other remedies under the Govt. rules, proceed to cancel the order or agree to accept a delayed delivery on the condition of payment of liquidated damages by the bidder, a sum equivalent to 1% of the total cost as indicated in the Purchase Order (which will be deemed as agreed price) for each week or part thereof of delay until actual delivery or performance is completed and such penal charges shall be limited to a maximum of 5% of the total cost. Once the maximum is reached, DS&D may proceed on its own to consider the termination/cancellation of the order. For calculation of penalty the date of receipt of material at the Planetarium is the date of delivery subject to the condition that the goods/material is received in good working condition. Materials/Equipment/software/shows which are not of acceptable quality or are not confirming to the specification would be deemed to be not delivered. For penalty, the number of days would be rounded off to the nearest week and penalty calculated accordingly.
12. **PRICE FALL CLAUSE** :- The price charged for the stores shall not exceed in any way the lowest price at which you quote/supply the stores of identical description of stores to State Govt./Central Govt./Institutions/ undertaking/ GeM any other person during the delivery period/ currency period of the rate contracts. If at any time during the delivery/currency period, you reduce the rate, sale price of quoted stores to any person at the price lower than the price chargeable under this supply order/contract, you are required to inform this office and price payable under the supply order/contract for the stores supplied after the date of coming into force of such reduction of rates shall stand correspondingly reduced to that level. You shall promptly notify the reduction of rates to this office as well as to concerned Indenting Officers/ Consignees. You shall also give a certificate on your bills that the rates charged by you are not in any way higher to these quoted to the GeM, New Delhi and other State Govt. Central Govt. Institutions etc. during the corresponding period. The Indenting Officer shall be required to ensure that requisite certificate is given by the concerned firm on the bills before releasing their payments. Full benefit due to reduction in GeM rate contract or Net Dealer Price during the period of rate contract/ supply will be passed on to the consignee in addition.

13. Failure the effect supply within the stipulated delivery period or repeatedly offering supply liable for rejection may render to forfeiture of Earnest Money/ Security and other penal action as per terms & conditions of the contract will also be taken.

14. SCHEDULE "B":- One copy of the Schedule "B" i.e. conditions of contract applicable is sent herewith duly signed on behalf of Governor of Haryana.

Other terms & conditions will be as per NIT(Schedule-A/Schedule-B) attached.

Encls.a/a


  
Executive Engineer,  
Supplies & Disposals, Haryana,  
For & On behalf of Governor of Haryana

Endst.No. 129/HR/E-4/2024-25/

Dated:

A copy of the above is forwarded to The Secretary/EC, Haryana State Council for Science and Technology, Bays No. 35-38, Sector-2, Panchkula, Haryana w.r.t. their indent No. 637 dated 04.03.2024, for information and necessary action please.

He is also requested to issue consignee wise dispatch instructions direct to the firm immediately under intimation to this office.


  
Executive Engineer,  
For Director General, Supplies & Disposals,  
Haryana.

Endst.No. 129/HR/E-4/2024-25/ 23/5

Dated: 13/3/24

A copy is forwarded to the following for information and necessary action:-

1. The Accountant General (Audit) Haryana, Sector-33, Chandigarh.
2. The Excise & Taxation Commissioner, Chandigarh.
3. St. Section.
4. Programmer O/o DGS&D, Haryana.
5. Department Processing Charges O/o DGS&D, Haryana.

  
Executive Engineer,  
For Director General, Supplies & Disposals,  
Haryana