Tender document for Immersive Group Virtual Reality Tour in bus in Transit of Atal Tunnel, Rohtang on Leh-Manali Highway (H.P)



Request for Proposal for Selection of a Creative & Execution Company to set up Immersive Group Virtual Reality Tour in bus of Atal Tunnel, Rohtang on Leh-Manali Highway (H.P)

HPSEDC/AtalTunnel/2K22-2361

H.P. STATE ELECTRONICS DEVELOPMENT CORPORATION LTD., 1st FLOOR, I.T BHAWAN, MEHLI, SHIMLA-171013, H.P. Tel. Nos.: 0177-2623259, 2623043, 2623513 (Telefax): 0177-2626320 Email: hpsedc@hpsedc.in

Website: www.hpsedc.in, tender document can also be downloaded from https://hptenders.gov.in

List of abbreviations

D (F D)	
Request For Proposal	
Himachal Pradesh State Electronics Development Corporation	
Limited	
Himachal Pradesh State Electronics Development Corporation	
Himachal Road Transport Corporation	
Earnest Money Deposit	
Service Level Agreement	
Quality and Cost Based Selection	
Financial Year	
Permanent Account Number	
T CITIALICITE ACCOUNT NUMBER	
Goods and Service Tax Number	
Chartered Accountant	
Date of signing the contract	
Curriculum Vitae	
On-Board diagnosis	
Inertial Measurement Unit	

	ender document for immersive Group virtual Reality Tour in bus in Transit of Atal	
Τu	unnel, Rohtang on Leh-Manali Highway (H.P)	1
		1
1.	,	6
2.		6
3.	Eligibility Criteria	8
	3.1 Pre- Qualification	8
	3.2 Technical Qualification	10
	3.3 Financial Bid Evaluation	14
4.	Instruction to Bidders	14
	4.1 Objective	14
	4.2 Scope of work	14
	4.2.1 Introduction	14
	4.2.2 Manpower Requirement	16
	4.2.3 Content	17
	4.2.4.1 Ticketing Software:	18
	4.2.5 Project Stages	18
	4.3 General Terms & Conditions	22
	4.4 Bid Validity	23
	4.5 Tender Document Fees	23
	4.6 Amendment to the Tender document	23
	4.7 Clarifications	24
	4.8 Earnest Money Deposit (EMD)	24
	4.9. Preparation of Bid	24
	4.10 Bid Rejection Terms & Condition	25
	4.11 Deviations	26
	4.12 Bid Opening	26
	4.13 Bid Evaluation	26
	4.13.2 Technical Evaluation	27
	4.13.3 Commercial Bid Evaluation	27
	4.14 Notification of Award of Contract	28
	4.15 Performance Bank Guarantee	28

4.16 Signing of the Contract	28
4.17 Fraud and Corrupt Malpractices	28
4.18 Waivers	29
4.19 Confidentiality	29
4.20 Duties, Taxes and Statutory Levies	30
4.21.1 Execution Schedule	30
4.21.2 Implementation Guidelines	30
4.21.3 Approvals	31
4.21.4 Synchronizing with Agencies	31
4.21.4.1 Structure for Governance & its procedures	31
4.21.5 Audit, Access & Records	32
4.21.5.1 Access	32
4.21.5.2 Auditing Rights	32
4.21.5.3 Records	33
4.22 Operation & Maintenance	33
4.23 Payment Schedule	33
5. General Contract Conditions	34
5.1 Standards of Performance	34
5.3 Applicable Law	35
5.4 Termination of Contract or Work Orders	35
5.4.1 Termination of Contract for default:	35
5.4.2 Termination of contract for Convenience:	36
5.4.3 Termination of contract for Insolvency, Dissolution, etc.:	37
5.5 Exit Management	37
5.16 Loss of Property and/or Life	42
5.17 Representations and Warranties	43
5.18 Force Majeure	43
5.19 Resolution of Disputes	44
5.20 Legal Jurisdiction	44
5.21 Other Information	44
6. Service Level Agreement	45
6.1 Penalties	46
7. Annexures	49

	7.1 Self-Declaration on not being blacklisted (To be scanned and uploaded)	49
	7.2 Experience of executing and successfully completing work	50
	7.3 Self-Declaration	51
	7.4 Format for Performance Bank Guarantee (Hard copy required post contract is awarded)52
	7.5 CV's of Key Personnel	56
	7.6 Bid Security Declaration	57
	7.7 Compliance Sheet	58
F	inancial Bid	64
	8.1 Financial Bid - I	64

1. Executive Summary

Himachal Pradesh is one of the most popular Hill States of India. People from all parts of the country as well from different parts of the world visit this beautiful State to enjoy its natural and scenic beauty. The State Government has acted as a catalyst, trendsetter and a prime mover for the promotion of domestic and foreign tourism in Himachal Pradesh.

Atal tunnel, Rohtang project was a long thought project created to increase tourism in the area. Rohtang and its surrounding being a mesmerizing place attracts a lot of tourists in the state. The thought behind creating this immersive experience is to simulate a similar virtual/3D world that will help tourists visit unexplored places in the state within a time span of 30 mins without actually being physically present at those places.

In order to achieve this, the State Government plans on creating an immersive bus experience that will transport the visitors to a 3D unexplored world of Himachal. This will be done by modifying a bus and making it into one of its kind immersive moving vehicle by installing a custom display along the interior periphery of the bus that will have specialized audio video synchronization along with the real movement of the bus which will create an extraordinary VR experience.

2. Critical Date & Information

Immersive group virtual reality tour in Bus of Rohtang tunnel on Leh-Manali Highway (H.P)			
Tender Reference Number HPSEDC/AtalTunnel/2K22-2361 date: 09/06/2022			
Tender Inviting Authority Designation and Address	H.P. STATE ELECTRONICS DEVELOPMENT CORPORATION LTD., 1st FLOOR, I.T BHAWAN, MEHLI, SHIMLA-171013, H.P. Tel. Nos.: 0177-2623259, 2623043, 2623513 (Telefax): 0177-2626320 Email: hpsedc@hpsedc.in		
Tender document availability	Tender Can be downloaded from https://hptenders.gov.in and http://www.hpsedc.in		

Cost of Tender Document (Form Fee including GST)	INR 10,000 (Ten Thousand Rupees Only) in shape of Demand Draft/ RTGS in HPSEDC A/c: (State bank of India Khalini, Shimla-2 Account no. 55069383586 IFSC Code-SBIN 0051132) in favor of Managing Director, H.P. State Electronics Development Corporation, I.T. Bhawan, Mehli, Shimla-13
Earnest Money Deposit (EMD)	INR 20,00,000 (Twenty Lakh Rupees Only) in shape of BG/ Demand Draft/ RTGS in HPSEDC A/c: (State bank of India Khalini, Shimla-2 Account no. 55069383586 IFSC Code-SBIN 0051132) in favor of Managing Director, H.P. State Electronics Development Corporation, I.T. Bhawan, Mehli, Shimla-13
Bid validity period	180 days from the last date (deadline) for submission of e-Tenders.
Performance Bank Guarantee	3% of the Contract Value
Method of Selection	QCBS (70:30)
Operation & maintenance	5 Years from Go-Live
Completion Time	6 Months
Publish Date	10/06/2022
Document Download Start Date	10/06/2022 at 11:30AM
Pre Bid Meeting Date	18/06/2022 at 11:30AM through video conferencing. VC Link: https://meet.google.com/vum-xvzo-gao
Bid Submission Start Date	24/06/2022 at 11:30AM
Bid Submission End Date	01/07/2022 upto 2:30PM
Bid Opening Date	02/07/2022 at 2:30PM
Venue	HP State Electronics Development Corporation Ltd., 1 st floor, IT Bhawan, Mehli, Shimla-171013

3. Eligibility Criteria

3.1 Pre- Qualification

Consortium/ Joint Venture is not allowed.

S. NO	ELIGIBILITY CRITERIA	DOCUMENTS TO BE SUBMITTED
Α	The Bidder should be registered with any Central Govt / State Agency, under the Companies Act, 1956 or Companies Act, 2013 or a partnership firm registered under Indian Partnership Act, 1932 or Limited Liability Partnership registered under Indian Limited Liability Partnership Act, 2008; and should be in business for at least past 5 years. JV/Consortium not allowed.	Memorandum of Association (MoA), Articles of Association (AoA) of bidder and detailed profile of the Company/ Firm/ Government License and COI, GSTN, PAN for proprietors/ bidder
С	Tender Fee and EMD should have been submitted (Receipt/Copy of the demand draft/RTGS should be uploaded. Original hardcopy of Tender fees and EMD should be submitted physically in HPSEDC before last date of bid submission.)	Tender Fee and EMD may be submitted through Demand Draft/BG (in case of EMD only)/RTGS in HPSEDC A/c: A/C No. 050010200006521, IFS Code: UTIB0000050, Axis Bank, SDA Complex, Shimla-9, HP.)
D	The Signatory signing the Bid on behalf of the Bidder should be duly authorized by the Board of Directors/Partners of the Bidder to sign the Bid on their behalf in which name and designation of such person should be mentioned with proof of his/her association with the company	Power of Attorney/ Board Resolution executed in favor of authorized signatory.
Е	The Bidder should not have been black listed by any Government or quasi-Government entity in India for breach of any applicable law or violation of regulatory prescriptions or breach of agreement as on the date of submission of Bid.	Self-declaration on Rs 100 stamp paper of the bidder duly notarized

F	The bidder must possess a valid GSTIN and PAN No.	Copy of the GST Certificate and PAN.
G	The bidder must have an average annual turnover of at least 7.5 Crore during the last three financial years i.e. 2019-20, 2020-21, 2021-2022	CA certificate for turnover and Audited Balance sheets from company Statutory Auditor/ CA. If audited Balance Sheet of 2021- 22 not available then provisional Balance Sheet of 2021-22 may be submitted
Н	The bidder must have completed in the last 5 years 3 similar works each with value >=2 Cr, Or 2 similar works each with value >=3 Cr, Or 1 similar work each with value >=5 Cr	Completion certificate issued by authorized/ competent authorities for whom bidder have executed work along with name, designation and address of the issuing authority
ı	The Bidder should have positive net worth as on 31st March 2021.	CA certificate for net worth and Audited Balance sheets from company Statutory Auditor/ CA
J	Minimum requirement of human resource on payroll: 1)Software Engineer with B.Tech/B.E. in Computer Science with experience of at least 2 years 2)Hardware Engineer with B.Tech/B.E. in Electronics with experience of at least 2 years 3)Visualizer with Diploma in Multimedia with experience of at least 2 years 4)Animator with Diploma in 3D Animation with experience of at least 2 years	CV as per format mentioned in Annexure 7.5 along with required qualification documents and experience proof, wherever required.
K	Valid ISO Certification	Bidder should submit valid ISO 9001:2015 certificate

Similar Work Means: Work of 3D Content Development in a large format screen (>=350 sq ft) like LFD, LED that is permanent in nature.

3.2 Technical Qualification

S. NO	Category	Marking Criteria	Maximum Marks	Documents to be submitted
Α	The Bidder's average annual turnover for the following financial years: FY 2019-20, 2020-21, 2021-22.	Turnover above 15 crores: 10 Marks Turnover From 10 to 15 crores: 7.5 Marks Turnover upto 10 crores: 5 Mark	10	CA certificate for turnover and Audited Balance sheets from company Statutory Auditor/ CA. If audited Balance Sheet of 2021-22 not available then provisional Balance Sheet of 2021-22 may be submitted
В	Prior experience of the Bidder in executing work which includes "location tracking and mapping in any app" for any government or reputed private institute in the last five years	1 work : 5 marks	5	Copies of work done certificate along with the completion certificate or payment proof as per format in Annexure 7.2

H.P. State Electronics Development Corporation Ltd.

С	Prior experience of the Bidder in executing work which includes "developing any app which includes integration with OBD (On-board diagnostics)" for any government or reputed private institute in the last five years	1 work : 5 marks	5	Copies of work done certificate along with the completion certificate or payment proof as per format in Annexure 7.2
D	Prior experience of the Bidder in executing work which includes "installing transparent screen as per 4.2.6" for any government or reputed private institute in the last five years	1 work : 5 marks	5	Copies of work done certificate along with the completion certificate or payment proof as per format in Annexure 7.2

H.P. State Electronics Development Corporation Ltd.

Е	Prior experience of the Bidder in executing work which includes "developing an application which requires integration with various sensor as per 4.2.6" for any government or reputed private institute in the last five years	1 work : 5 marks	5	Copies of work done certificate along with the completion certificate or payment proof as per format in Annexure 7.2
F	Prior experience of the Bidder in developing VR/Mixed reality software/content	More than 2 works : 15 Marks 2 work : 10 Marks 1 work : 5 marks	15	Copies of work done certificate along with the completion certificate or payment proof as per format in Annexure 7.2
G	Prior experience of 3D Content Development in a large format screen	5 marks for each work	20	Copies of work done certificate along with the completion certificate or payment proof as per format in Annexure 7.2
Н	Work Plan Proposal	Proposed Technology , Content, Hardware and Software Layout	5	Technical presentation

H.P. State Electronics Development Corporation Ltd.

I	Working Methodology and Approach	Understanding of Concept and the Approach Taken, Approach to maintain all the SLAs and handling change requests, Identification of major risks and their mitigation plan	5	Technical presentation
J	Presentation	Concept design and presentation	10	Technical presentation
K	Simulation of the bus ride	Simulation Video	15	Simulation

Only those bidders whose absolute technical score is 70 or more shall be considered by HPSEDC for further evaluation. Minimum 3 key personnel should be on the payroll of the bidders as mentioned at Table 3.1 item no - J, non-meeting which will lead to disqualification. The 4th key personal detail should be attached along with the bid of which the bidder has to hire for this project with complete details of the company who should not be directly or indirectly associated with HPSEDC or any firm associated with this project. In addition, Evaluations will be based on documentary evidence submitted by the Bidders/Applicants and presentation before the HPSEDC and/or concerned department(s).

Exemption, if any in evaluation criteria or any other terms & conditions of this document, will be as per Notification No. 4-Ind/SP/Misc/F/6-10/4/80-Vol-V dated 16.05.2020 issued by Controller of Stores Himachal Pradesh or any other orders issued by Govt. of Himachal Pradesh in case the committee deems it fit.

TECHNICAL SCORE = 100 X TECHNICAL MARKS AWARDED TO THE BIDDER / TECHNICAL MARKS ACHIEVED BY THE BID THAT SCORED BEST AMONG BIDS {Adjust to two decimal places}.

3.3 Financial Bid Evaluation

Bidders should submit the financial bid as per the format given in Section 8.1.

The bids will be evaluated on Quality and Cost Based Selection method (QCBS) basis with 70% weightage on technical score and 30% weightage on financial score.

FINANCIAL SCORE = 100 X FINANCIAL PROPOSAL OF LOWEST BIDDER / FINANCIAL PROPOSAL OF BIDDER UNDER CONSIDERATION (Adjust to two decimal places)

THE COMPOSITE SCORE SHALL BE COMPUTED AS FOLLOWS:

COMPOSITE SCORE = (TECHNICAL SCORE X 0.70) + (FINANCIAL SCORE X 0.30)

The bidder with the highest composite score will be declared as the successful bidder. In case of tie in the highest composite score of multiple bidders, the bidder with higher technical score will be declared as the successful bidder.

Note: Technical score is the technical marks scored by the bidder in the technical bid.

4. Instruction to Bidders

4.1 Objective

The Atal tunnel being one of its kind and the most significant places in the country, it will act as one of the major tourist attraction spots, creating an immersive experience as an add-on to the adventure will not only help in further boosting tourism but also help make the whole experience of a tourist more unique.

The Objective of the project is to Conceptualize, Design, Create and Implement an Immersive Bus Experience that will take the visitor to a virtual world of unexplored places in Himachal.

4.2 Scope of work

4.2.1 Introduction

Atal Tunnel (or Rohtang Tunnel) is a highway tunnel built under the Rohtang Pass in the eastern Pir Panjal range of the Himalayas On the Leh-Manali Highway in Himachal Pradesh, India. At a length of 9.02 km, it is the longest tunnel above 10,000 feet (3,048 m) in the world and is named after former Prime Minister of India, Atal Bihari Vajpayee.

An Immersive Group Virtual Reality Bus tour proposed to be introduced. This Virtual Reality Bus Tour will act as a facilitator to the Tourism, Travel and Hospitality Industry. The highlights of Scope of Work will be:

- 1. To give the tourists an immersive experience about Himachal and make them realize the attractive tourist spots, cultural and heritage of the state which will eventually attract more tourists from around the world.
- 2. An immersive bus show during the ride from South Portal to North Portal of the Atal Tunnel (of approx. 15-20 min).
- 3. The show will contain Content that will be developed in a way so that it is easy to sync with the movement of the bus.
- 4. The Show will run on LEFT, RIGHT, FRONT & TOP sides of the bus.

Electric buses can store the electricity on board, or can be fed continuously from an external source. Buses storing electricity are majorly battery electric buses, in which the electric motor obtains energy from an on-board battery.

The bus that can be considered for this particular project is an Electric Bus, made in India (refer to 4.2.6 Item 1).

Modification of the bus by the successful bidder:-

A bus shell will be purchased. A bus shell is a bus without its interiors i.e., without the chairs, audio systems, etc. An aluminum frame will be fitted inside the interior of the bus for better protection of the complex interior of the bus.

Aluminum frame screens will be placed. After this a conduit system will be installed which will have in it the HDMI and other power cables. Post the conduit installation Screens and audio system will be installed.

For repair and maintenance of screens, there will be an assembly frame at the bottom of the screens which will be on the left and right side of the bus and can easily be opened for maintenance. These openable assembly frames are shockproof and nonconductive. All screens are screw-tightened and fitted within the aluminum casing frame which if required can be easily replaceable. Bus modification should be done in such a way that the maximum time permissible for replacement of any component in the system including display screen shouldn't be more than 1-2 hours. A layer of protective films and casing which are IP66 and IP67 rated will be fixed to protect the screens externally and internally. The IP66 & IP67 casing will protect the screens from any moisture and dust particles in and outside of the bus.

Each screen shall have a toughen glass layer on both sides to protect it from any jerks/shocks due to bus movement. IP66 and IP67 shockproof server rack will be used to keep the media and primary servers. The bus should also accommodate the server rack and auxiliary battery pack to run the system.

A special provision will be made for emergency windows and doors. There will also be a provision for wheelchair, first aid box, fire extinguishers and other safety measures as per prevailing rules. A minimum distance must be maintained between the screens on windows and the viewers sitting close to them. The chairs will be installed at last.

Auxiliary batteries are required for running these systems/ Immersive VR shows. Its battery capacity should range between 30kw to 40kw, however the successful bidder should submit a proper calculation of the auxiliary battery requirement. The appropriate space required for housing above will be worked out by the Successful Bidder during the customization of the bus as per available space.

- 1. Minimum 24-25 Seater
- 2. Fully Electric
- 3. Air Conditioned
- 4. Equipped with Fire Extinguisher and Air suspension
- 5. Length: Up to 9500 mm
- 6. Wheelbase: 4200mm 4950mm
- 7. 100% charging time: 30-45 minutes.
- 8. Nominal Operating range in single charge 180 Km.
- 9. Minimum Ground Clearance will be 200 mm.
- 10. Electrical energy consumption will be less than 0.80 Kwh/km
- 11. The bus can withstand harsh weather condition

For more details about the bus refer to 4.2.6 Item no 1

Compliances:

- 1. Central Motor Vehicle Act, 1989 (CMVR)
- 2. Motor vehicle Act, 1988 (MVA)
- 3. HP Motor Vehicle Rule

4.2.2 Manpower Requirement

HPSEDC will provide the offline ticket vending staff, rest all the staff required to execute the project, bus and other components of the project shall be provided by the bidder for operations.

4.2.3 Content

The Content needs to be creative and should be made in a way that it shows smooth transitions from one subject to another.

- 1. A 3D virtual world will be created by creative artists.
- 2. Videos and photos taken will be used to develop the 3D content to the highest possible degree of photorealism.
- 3. The content can have a combination of 3D model or 2D content merged with the 3D environment to give it a realistic feel.
- 4. The visible portion of the 3D world which can be seen on the screen inside the bus will be rendered, displayed and will be in sync with the movement of the bus. (Similar to how the view area is rendered on the screen while playing a game ex. PUBG, Call of Duty, Need for speed etc.). The output of the rendered content will be 4K.
- 5. The height/position of the camera in the 3D world should be at the viewing height of a person sitting inside the bus.
- 6. The Content will be developed in a way so that it is easily synchronized with the movement of the bus.
- 7. Sensor will give acceleration & Displacement in the x,y,z axis which will help in displaying the content.
- 8. The audio & video of the BUS will be synchronized with the movement of the BUS.
- 9. Entire audio for the content will be divided into each theme and the playback speed of the audio will be normal and it will be in sync with the bus movement.
- 10. The system will be developed smartly in such a way that the audio for each theme will be played within its respective duration taking in consideration the speed of the bus.
- 11. Real Life high poly 3D models will be used to build the environment.
- 12. Surround Sound for 3D sound effect

Content should focus on:

- 1. About Atal Tunnel Project including history.
- 2. About Rohtang Pass
- 3. Introduction of Himachal Pradesh
- 4. History of Himachal Pradesh
- 5. Tourist spots in Himachal Pradesh
- 6. Culture of Himachal Pradesh
- 7. Heritage of Himachal Pradesh
- 8. Adventure Tourism in Himachal Pradesh

9. Flora & Fauna of Himachal Pradesh

Time each way –15 minutes (approx.). Total time taken both ways – 30 minutes (approx.)

4.2.4 Software

4.2.4.1 Ticketing Software:

A COTS/Bespoke Ticketing software should be provided by the successful bidder for booking of tickets by the public user. The Software should allow selection of seats from the booking UI and users should be able to pay online through various online mechanisms available during the time of execution of the project. The Software should email/SMS the booking reference to the user for future reference.

Booking of tickets should be done by 2 modes, viz., Online and Offline.

For the online bookings, the successful bidder will set up an online portal that will give a consolidated list of visitors at the end of a specified period. The Online booking portal should have integration with a minimum of 2 payment gateways.

For offline bookings, a ticket counter will be set up at the starting point (South Portal) by HP Tourism. However, booking at the counter shall also be through the online portal with special access to the ticket counter.

The successful agency will have to maintain 99.9% uptime for the booking portal.

4.2.5 Project Stages

With reference to the above scope of work, the project is divided into following stages:

- Stage 1 Approval of Concept Design by HPSEDC
- Stage 2 Purchasing of Bus and its required hardware
- Stage 3 Content Creation & Purchase of all Hardware

Stage 4 - Successful Testing and commissioning of all the Developed Software parts including Creative Content and its successful integration with hardware.

Stage 5 - On final project launch/ Go-Live at Manali

Stage 6 - Operation & Maintenance for 5 years

H.P. State Electronics Development Corporation Ltd.

S. N	Item	Specification	Document
1	BUS	Supply of Electric bus Shell with the following specifications: Seating Capacity: Minimum 24-25, 2 fast chargers, Provision of air conditioning, Low NVH, Air Suspension, Fully Electric, Nominal Operating range in single charge 180 Km, Minimum Ground Clearance should be 200mm, Minimum warranty of 6 Years or 450000 km whichever is earlier, Equipped with Fire Extinguisher, Wheelbase of 4200mm - 4950mm, Length of upto 9500mm and 100% Charging time of not more than 30 - 45 minute. The bus should be made in India and the Original Equipment Manufacturer (OEM) should have relevant capability as per incentive eligibility assessment procedure under FAME scheme Original Equipment Manufacturer (OEM) should be engaged in manufacturing of Electric buses in India and should have in business of manufacturing and selling of buses / vehicles for at least for the last 3 years and should have sold at least 100 Electric buses and Electrical energy consumption should be less than 0.80 Kwh/km and Electrical Regeneration is required. Bus should comply with the latest provision of	"Manufacturer Authorization Form (MAF)" from the OEM

4	Transpare nt Screen	Power: 260 Watt, 240 V AC Area: Minimum area of 22 sqm or more (i.e., front, sides, corner and top of bus) PPI (Pixel Per inch): having minimum 3840 * 2160 Resolution with	"Manufacturer Authorization Form (MAF)" from the OEM / Datasheet &
3	Media Server	Server: i9/Xeon Latest Generation with Lifetime OS license, RAM: 64 GB RAM of DDR4 3200 Mhz, GPU: to drive 4 X 4K output with Ray Tracing Support, SSD:1 TB SSD having following interface SATA 6Gb/s should be compatible with SATA 3Gb/s SATA 1.5Gb/s interfaces having Sequential Read/Write speeds up to 550/520 MB/s respectively	"Manufacturer Authorization Form (MAF)" from the OEM
2	Primary Server	Server: Rack Mountable Processor: i7/i9/Xeon Latest Generation OS: Lifetime license RAM: 64 GB of DDR4 3200 Mhz GPU: To drive 2 Output with Ray Tracing Support SSD: 1TB SSD having following interface SATA 6Gb/s should be compatible with SATA 3Gb/s SATA 1.5Gb/s interfaces having Sequential Read/Write speeds up to 550/520 MB/s respectively Power: 260 Watt, 240 V AC	"Manufacturer Authorization Form (MAF)" from the OEM
		the Central Motor Vehicle Act,1989(CMVR), Motor vehicle Act, 1988 (MVA), HP Motor Vehicle Rule in this behalf along with any and all the amendments therein and other statutory and legal requirements as applicable on the date of delivery/registration of bus with state transport of Himachal Pradesh The bus should be in compliance with the FAME Scheme including carriage of material in all lead and lift.	

		Transparency: 60 - 65 % transparency with minimum bezel Refresh Rate: 50 hertz HDMI port:1 Supported aspect ratio: 16:9 Power requirement of 240 V AC, 60 - 90 Watt	specification of the Hardware
5	IMU	Degree of Freedom: 6 Gyroscope Angular rate range: -245 to 245 deg/s, Accelerometer acceleration rate range: -60 to +60 m/s2, pitch & roll range: -60 to +60 degree	Datasheet & specification of the Hardware
6	LSV	Max acceleration detection : 300 [m/s2] minimum velocity detection : 5000 meter /minute maximum power requirement :24 DC	Datasheet & specification of the Hardware
7	OBD (On-board diagnostic s)	wired ability to read data streams and freeze Frame, oil light reset, SAS (Steering Systems and Suspension Systems), SRS (Shock Response Spectrum), DPF(Diesel particulate filters), EPB(Electric Park Brake), TPMS (Tirepressure monitoring system), battery check function	Datasheet & specification of the Hardware

4.3 General Terms & Conditions

- 1. All information supplied by bidders shall be treated as contractually binding on the bidders on successful award of the assignment by HPSEDC on the basis of this tender.
- 2. No commitment of any kind, contractual or otherwise shall exist unless and until a formally contract has been executed by on behalf of the HPSEDC by the authorized signatory. The HPSEDC may cancel this RFP at any time prior to formally contract is executed by or on the behalf of HPSEDC.
- 3. This RFP does not constitute an offer by HPSEDC. The bidder's participation in this process may result in HPSEDC, selecting the bidder to engage towards execution of the contract.
- 4. The bidder should ensure authenticity, accuracy and creativity in the content. There should be no copyright infringement.

4.4 Bid Validity

- 1. Bids shall remain valid upto 120 days from the date of submission of bids. HPSEDC reserves the right to reject a proposal valid for a shorter period and may declare as non-responsive.
- 2. In exceptional circumstances, the HPSEDC may solicit the bidder's consent to extend the period of validity. The request and the response thereto shall be made in writing. Extension of validity period by the bidder should be unconditional for which nothing extra shall be paid. A bidder may refuse the request without forfeiting the Earnest Money Deposit. A bidder accepting the request will not be permitted to modify its Bid.
- 3. HPSEDC reserves the right to annul the tender process, or to accept or reject any or all bids in whole or part at any time without assigning any reasons and without incurring any liability to the affected bidder(s) or any obligation to inform the affected bidder(s) of the grounds for such a decision.

4.5 Tender Document Fees

The bidder may download the tender document from the website as mentioned in the document control sheet. The bidder shall furnish tender document fees, if any, as part of the Eligibility Criteria, as per detail provided in the Document Control sheet. Any processing fees associated with the tender document shall be borne by the bidder and such fee are non-refundable.

4.6 Amendment to the Tender document

- 1. Amendments necessitated due to any reasons, shall be made available on the website only as provided in the document control sheet. It shall be the responsibility of the bidders to keep on visiting the website to update their in bids. HPSEDC shall not be responsible for any oversight or negligence on the part of the bidders on the amendments made to the terms and conditions of the tender document notified through the website.
- 2. The corrigendum (if any) & any other related communication regarding this tender shall be posted **only on the website and no separate communication either in writing or through email will be made** to any interested/ participating bidders.
- 3. Any such corrigendum(s) or addendum(s) or clarification(s) shall be deemed to be incorporated into the tender document.
- 4. HPSEDC, at its discretion and at any moment of time, may extend the last date for the receipt of Bids.

4.7 Clarifications

In case, if any clarification is required, HPSEDC is free to ask such clarification from the bidders without changing the sanctity of the bid.

4.8 Earnest Money Deposit (EMD)

1. The bidder shall furnish EMD, as part of the Eligibility Criteria, as per detail provided in the Document Control sheet.

4.9. Preparation of Bid

The Bidder must comply with the following instructions during the preparation of Bid:

- 1. The Bidder is expected & deemed to have carefully examined all the instructions, guidelines, forms, requirements, appendices and other information along with all terms and conditions and other formats of the bid. Failure to furnish all the necessary information as required by the bid or submission of a proposal not substantially responsive to all the requirements of the bid shall be at the Bidder's own risk and may be liable for rejection.
- 2. The Bid and all associated correspondence shall be written in English and shall confirm to prescribed formats. If any supporting documents submitted are in any language other than English, a translation of the same in English language should be done duly attested by the Bidders. Any interlineations, erasures or over writings shall be valid only if they are authenticated by the authorized person signing the Bid.
- 3. The bid shall only be uploaded on the https://hptenders.gov.in and HPSEDC website by the Bidder or duly authorized person(s). The bids submitted through fax/e-mail etc. shall not be accepted. No correspondence will be entertained on this matter.
- 4. All payments / deposits / fees with respect to this tender shall be in Indian Rupee only payable through DD.
- 5. No bidder shall be allowed to modify, substitute, or withdraw the Bid after the last date of its submission.
- 6. The bidder shall be responsible for all costs incurred in connection with participation in the Bid process, including, but not limited to, costs incurred in the conduct of informative and other diligence activities, participation in meetings/ discussions/ presentations, preparation of bid, in providing any additional information required by HPSEDC to facilitate the evaluation process, in negotiating definitive "Successful bidders" and all such

activities related to the bid process. HPSEDC will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

- 7. Every page of the documents submitted by the bidder must be duly signed by the authorized signatory of the bidder along with the Organization seal.
- 8. Failure to comply with the below requirements shall lead to the Bid rejection:-
 - > Comply with all requirements as set out within this RFP.
 - Submission of the forms and other particulars as specified in this RFP and respond to each element in the order as set out in this tender.
 - Non-submission of all supporting documentation specified in this RFP, corrigendum or any addendum issued.

4.10 Bid Rejection Terms & Condition

HPSEDC may at its sole discretion and at any time during the evaluation of Bids, disqualify any Bidder, if the Bidder has:

- 1. Made misleading or false representations in the forms, statements and attachments submitted in proof of the eligibility requirements;
- 2. Exhibited a record of poor performance such as abandoning work, not properly completing the contractual obligations, inordinately delaying completion or financial failures, etc. in any project in the preceding three years.
- 3. Failed to provide clarifications related thereto, when sought;
- 4. Submitted more than one Bid (directly/in-directly);
- 5. Declared ineligible by the Government of India/State/UT Government for corrupt or fraudulent practices or blacklisted.
- 6. Engages in a corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice.
- 7. Made material misrepresentation or has given any materially incorrect or false information.
- 8. Submitted a bid with price adjustment/variation provision.
- 9. Documents are not submitted as specified in the RFP document.
- 10. Suppressed any details related to the bid.
- 11. Submitted incomplete information, subjective, conditional offers and partial offers submitted or Not submitted documents as requested in this document
- 12. Submitted bid with lesser validity period
- 13. Any non-adherence/non-compliance to applicable RFP content
- 14. Directly or indirectly associated with HPSEDC or any firm associated with this project.

4.11 Deviations

Bids submitted with any deviations to the contents of the Tender Document will be considered as non-responsive. No deviation(s) / assumption(s) / recommendation(s) shall be allowed with the bid. Bidders must ensure that pre- bid meetings are attended by their authorized representatives so that all clarifications and assumptions are resolved before bid submission. No clarification after the pre-bid meeting shall be entertained whatsoever reason may be.

4.12 Bid Opening

- 1. HPSEDC will constitute a committee to evaluate the Bids submitted by Bidders. A two stage process, as explained hereinafter, will be adopted for evaluation of Bids. No correspondence will be entertained outside the process of evaluation defined by the HPSEDC.
- 2. The Bids submitted will be opened at time & date as specified in the document control sheet by HPSEDC or any other officer authorized by HPSEDC, in the presence of bidders or their representatives who may wish to be present at the time of bid opening.
- 3. Only two persons for each participating bidder shall be allowed to attend the Bid opening meetings.
- 4. The representatives of the bidders are advised to carry an identity card or a letter of authority from the bidders to establish their identity for attending the bid opening and pre bid meetings.
- 5. HPSEDC may, at its discretion, call for additional information from the bidder(s) through email/fax/telephone/meeting or any other mode of communication.

Such information has to be supplied within the set time frame as asked by HPSEDC, otherwise HPSEDC shall make its own reasonable assumptions at the total risk and cost of the bidder and the bid may lead to rejection. Seeking clarifications cannot be treated as an acceptance of the bid. For verification of information submitted by the bidders, the HPSEDC may visit the bidder's offices at its own cost. The bidders shall provide all the necessary documents, samples and reference information as desired by the HPSEDC.

4.13 Bid Evaluation

The bid evaluation will be carried out in a two stage process as under:

- 1. Technical evaluation.
- 2. Financial bid evaluation.

4.13.1 Pre-Qualification/ Eligibility Evaluation

- 1. The evaluation of the bidders will be carried out by the HPSEDC as per the prequalification / eligibility criteria defined in this tender document.
- 2. Only the bidders who fulfill the given pre-qualification / eligibility Criteria shall be eligible for the next round of evaluation.
- 3. Non-conforming bids will be rejected and will not be eligible for any further processing.

4.13.2 Technical Evaluation

1. The evaluation of the bidders will be carried out by the HPSEDC as per the Technical Evaluation criteria defined in the RFP document. Bidders who qualify in the technical evaluation round shall only be eligible for the next round of evaluation. Bids of the bidders, who do not qualify in the technical evaluation stage, will be rejected and will not be eligible for any further processing.

4.13.3 Commercial Bid Evaluation

- 1. Financial bids will be opened only for those Bidders, who secure the qualifying marks in the Technical Evaluation, on the prescribed date in the presence of bidder's representative.
- 2. The Bidders shall quote price as per financial Bid format.
- 3. A contract will be signed with "Successful bidder" which will be based on the highest composite score.
- 4. Any conditional financial bid will lead to disqualification of the entire bid.
- 5. In case of the negative rates quoted for any item, the successful bidder shall have to deposit additional amounts equivalent to the difference of the cost of price quoted and the actual price in the shape of DD (Demand Draft) equivalent to the cost difference.

6. Errors & Rectification:

- > If there is a discrepancy between words and figures in the financial bid, the amount in words will prevail.
- > If the bidder doesn't accept the correction of error(s) as specified, its bid will be rejected and EMD will be forfeited

4.14 Notification of Award of Contract

HPSEDC will notify the Successful Bidder in writing about acceptance of their bid. The notification of award will constitute the formation of the contract **after submission of performance bank guarantee and signing of contract agreement.**

4.15 Performance Bank Guarantee

Performance Bank Guarantee of 3% of the contract value rounded off to the nearest thousand Indian Rupees from a Scheduled Commercial Bank in India in favor of the MD. HPSEDC. It should be in the form of an unconditional, irrevocable and continuing Bank Guarantee as per Annexure 7.4 and would remain valid until the period of completion of project or as mentioned in Clause 4.23 (including the period of O&M/AMC), from the day it is executed with a claim period of at least 3 months post the expiry date. The Performance Bank Guarantee shall be submitted within 10 (Ten) days from the day the contract is signed. That failure of the "Successful Bidder" to submit Performance Bank Guarantee as per the terms of this clause, shall result in forfeiture of EMD and annulment of the award of the contract. Performance Bank Guarantee would be returned only after adjusting or /recovering any dues recoverable/payable from/by the Bidder including but not limited to any claims, losses, damages, expenses or liabilities in any way related to or arising from the exercise of any rights and/or performance of any obligations on any account under the contract. EMD of the successful bidder will be adjusted in the security amount and shall be released on completion of defect liability period or mentioned in this RFP.

4.16 Signing of the Contract

- 1. The Successful Bidder will sign the contract with HPSEDC within 15 working days of the release of notification and submission of Performance Bank Guarantee.
- 2. After signing of the contract, no variation or modification of the terms of the contract shall be made except by mutual written amendment signed by both parties.

4.17 Fraud and Corrupt Malpractices

- 1. All Bidders must observe the highest standards of ethics during the process of selection of "Successful Bidder" and during the performance and execution of contract.
- 2. For this purpose, definitions of the terms are set forth as follows:

- 3. "Corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the actions of the HPSEDC or its personnel in contract executions.
- 4. "Fraudulent practice" means a misrepresentation of facts, in order to influence a selection process or the execution of a contract, and includes collusive practice among bidders (prior to or after Proposal submission) designed to establish Proposal prices at artificially high or noncompetitive levels and to deprive HPSEDC of the benefits of free and open competition.
- 5. "Unfair trade practice" means supply of services different from what is ordered on, or change in the Scope of Work.
- 6. "Coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the selection process or execution of a contract.
- 7. Without prejudice to the rights hereinabove the HPSEDC will reject a proposal for award, if it determines that the Bidder recommended for award, has been determined to have been engaged in corrupt, fraudulent, unfair trade or Coercive practices.
- 8. HPSEDC will declare a bidder ineligible, either indefinitely or for a stated period of time, for award of contract, if the bidder is found to be engaged in corrupt, fraudulent and unfair trade practice in competing for, or in executing, the contract at any point of time.

4.18 Waivers

HPSEDC may waive any minor informality or non-conformity or irregularity in a bid, which does not constitute a material deviation, provided such waiver does not prejudice or affect the relative ranking of any Bidder.

4.19 Confidentiality

The Successful Bidder and their personnel shall not, either during the term or after expiration of this contract, disclose any proprietary or confidential information relating to the services, contract or the HPSEDC or operations without the prior written consent of the Department unless it is directed to do so by any statutory entity that has the power under law to require its disclosure.

4.20 Duties, Taxes and Statutory Levies

- 1) The Bidder shall bear all personal taxes levied or imposed on account of payment received under this Contract.
- 2) The Bidder shall bear all corporate taxes, levied or imposed on account of payments received from HPSEDC for the work done under this Contract.
- 3) The bid amount shall be inclusive of Goods & Services Tax ("GST") and the bidder shall also bear all other taxes and duties etc. levied or imposed by Central/State Govt or local authority time to time under the Contract for submission of final price bid, i.e., on account of payments received by him for the work done under the Contract. It shall be the responsibility of the Bidder to submit to the concerned tax authorities the returns and all other connected documents required for this purpose. The Bidder shall also provide such information to the HPSEDC from time to time, as it may be required in regard to the Bidder's details of payment made by the HPSEDC under the Contract for proper assessment of taxes and duties. The amount of tax withheld by HPSEDC shall at all times be in accordance with Indian Tax Law and will furnish to the Bidder original certificates (Challans) for tax deduction at source and paid to the Tax Authorities.
- 4) The Bidder shall be solely responsible for the payment /fulfillment of its tax liabilities and obligations under the Income Tax Act and other such laws in force and HPSEDC shall not bear responsibility for the same.

4.21 Project Execution

4.21.1 Execution Schedule

The project shall be completed in a period of 4 months after which Operations & Maintenance will be done by the bidder for 5 years from the date of Go-Live, out of which the operation and maintenance for the first year will be the part of defect liability period (i.e 1st year) and for remaining (2 to 5 year) bidder have to quote rate as per the items mentioned in the BOQ. The project execution will include concept planning, purchasing of bus, integration of hardware & software.

4.21.2 Implementation Guidelines

- 1. It must be made sure that the work is done and reported as per the schedule mentioned above. Any delays should be avoided. The contractor must make sure to meet the deadline mentioned above.
- 2. The Project Manager must make sure to deliver the work in the best quality possible.

- 3. The team deployed for the work should have the necessary skill set in order to execute the work properly.
- 4. All the work to be done at every stage shall have proper approval from the authority/ HPSEDC.
- 5. It would be the successful bidders responsibility to take approval of work at every stage from HPSEDC.
- 6. Before transportation to Manali the bidder will send written communication to the committee to inspect the final product.

4.21.3 Approvals

Following Approvals are required:

- 1. RTO registration of the bus in Himachal.
- 2. Permission for Electricity Connection.
- 3. Permission allowing setup of Electric Charging Station.

HPSEDC and concerned Government Department(s) will facilitate the bidder for any government approvals, if required.

4.21.4 Synchronizing with Agencies

The main purpose of this section is to clearly define all the principles that all the parties intend to follow in order to ensure uninterrupted and proper delivery of services. There must be flexibility to maintain and revise the relationship and agreement in the term period. The interest of all the parties must be aligned to make sure that there are no disagreements.

4.21.4.1 Structure for Governance & its procedures

A project manager will be appointed by the executing agency who will work in coordination with the officer in-charge of HPTDC. The Project Manager will act as a medium for communication between the parties.

The executing agency shall appoint their project manager within a week following the effective date. In case of any changes in the appointment of the project manager, a notice shall be given to the other parties at least a week prior.

A core managing committee will be appointed by the HPTDC to ensure smooth implementation and working of the project. The Core Managing committee will meet

regularly on a fortnightly basis to discuss the progress of the project. The meeting should necessarily cover:

- 1. Any concerning matters/ issues that are arising.
- 2. Consideration of periodic performance reports.
- 3. To check the progress of the project.
- 4. Any miscellaneous problems related to the project.

4.21.5 Audit, Access & Records

The audit, access and reporting rights and obligations of the 'HPSEDC', nominated agency and the implementing agency are given below:

- 1. During the project implementation phase and the Operation and Management Phase a timetable shall be made by successful bidder routine audits. The timetable shall be agreed upon by all the parties after deliberating in the meeting.
- 2. An untimely audit can also be conducted by HPSEDC or its nominated agency. This would be done in case of any doubts of fraud, security violation, breach of confidentiality by the implementing agency.
- 3. The implementing agency will from time to time inform HPSEDC of the stage of completion of work to check and audit the work of the stage.

4.21.5.1 Access

- 1. The Implementing Agency shall provide to 'HPSEDC' and its nominated agency the information related to all the employees, suppliers, subcontractors, agents and third party facilities as detailed in the documents & records.
- 2. Assistance shall be provided for audit and inspections.

4.21.5.2 Auditing Rights

The HPSEDC / Nominated agency shall have the right to audit the agents, supplier, third party facilities, data centers, documents, records, procedures, etc.

- 1. Implementing agency has to provide regular reports to the HPSEDC or its nominating agency or any Govt agency so nominated.
- The SLA (Service Level Agreement) shall be the same as the actual level of performance by the implementing agency. It must also be made sure that the Implementing Agency compiles with any other obligations under the SLA or any other agreements.

- 3. The implementing agency will bear the cost of yearly security audit and implementation audit.
- 4. Any internal information related to the implementing agency that is not related to the services associated shall not be included in audit rights.

4.21.5.3 Records

The implementing agency shall make sure that all the information provided shall be true and accurate. Handover of relevant documents and records shall be done upon termination or expiry of the agreement.

4.22 Operation & Maintenance

5 years of Operations and Maintenance will be done by the successful bidder from the launch date of the project. The Operation & Maintenance will include the following:

- 1. Maintenance of Equipment
- 2. Warranty of bus and its equipment
- 3. Quarterly update of content.
- 4. Training and Guidance to the required staff.
- 5. Training and Guidance of the nominated representatives of HPSEDC.
- 6. To regularly update the software.
- 7. Providing licenses, if required

Bus modification should be done in such a way that the maximum time permissible for replacing any component in the system including display screen shouldn't be more than 1-2 hours.

4.23 Payment Schedule

Payment to the successful bidder shall be released as per the following schedule, given the following timelines are met.

The CAPEX value cannot exceed 90% of the Financial Quote for the project.

H.P. State Electronics Development Corporation Ltd.

S No	Stages as per Scope of Work (4.2.5)	Payment to be made (in % of Bid value)
1	Approval of Concept Design by HPSEDC	5% of CAPEX
2	Purchase of BUS (BOQ Section A)	15% of CAPEX
3	Purchase of HARDWARE (BOQ Section C)	30% of CAPEX
4	SOFTWARE (BOQ Section D)	10% of CAPEX
5	Purchase of CONTENT (BOQ Section B)	15% of CAPEX
6	On final project launch at Manali	15% of CAPEX
7	During defect liability period and OPERATION AND MAINTENANCE (BOQ Section E)	10% (Equally divided in 20 Quarters)

- Within 10 days of 'Notification of Award', the successful bidder/ Supplier shall initially furnish a 3% Performance Bank Guarantee of total order value valid for 63 months to safeguard the purchaser against timely delivery/installation and maintenance of ordered equipments during the currency of the contract.
- 2. The defect liability period for the project will be 1 year from the date of final launch of project. The security amount so deducted will be released after the defect liability period.
- 3. Performance Bank Guarantee to be released after the completion of the project including the operations and maintenance period.
- 4. All types of taxes imposed by the central /state / local bodies shall be borne by the Successful Bidder.
- 5. General Contract Conditions

5.1 Standards of Performance

The Successful Bidder shall deliver the services and carry out their obligations under the contract with due diligence, efficiency and economy in accordance with generally accepted professional standards and practices. The Successful Bidder shall always act in respect of any matter relating to this contract as a faithful Successful bidder to the HPSEDC. The Successful bidder shall always support and safeguard the legitimate interests of the HPSEDC, in any dealings with the third party. The Successful bidder shall conform to the standards laid down in the RFP in totality.

5.3 Applicable Law

Applicable Law means the laws and any other instruments having the force of law in India as may be issued and in force from time to time. The Contract shall be interpreted in accordance with the laws of the Union of India and the State of Himachal Pradesh.

5.4 Termination of Contract or Work Orders

- 5.4.1 Termination of Contract for default:
- 1. The HPSEDC without prejudice to any other remedy for breach of Contract, by a written notice of not less than 7 (Seven) days sent to the Successful Bidder may terminate the Contract/ blacklist in whole or in part for any of the following reasons:
 - ➤ If the Successful Bidder fails to deliver and perform any or all the Services within the period(s) specified in the Contract, or within any extension thereof granted by the HPSEDC; or
 - ➤ If the Successful Bidder fails to respond for three consecutive queries given by the HPSEDC without assigning any satisfactory reason to HPSEDC in writing or by email as well as submission of hardcopy to HPSEDC; or
 - ➤ If the Successful Bidder fails to perform any other obligation(s) under the contract; or
 - > Laxity in adherence to standards laid down as per RFP as well as codes ,rules and regulations; or
 - > Discrepancies/deviations in the agreed processes and/or Services; or
 - > Violations of terms and conditions stipulated in this RFP.
- 2. In the event the HPSEDC terminates the Contract in whole or in part for the breaches attributable to the Successful Bidder, the HPSEDC may procure, upon such terms and in such manner as it deems appropriate, Services similar to those undelivered, and the

Successful Bidder shall be liable to the HPSEDC for any increase in cost for such similar Services. However, the Successful Bidder shall continue the performance of the Contract to the extent not terminated.

3. If the contract is terminated under any termination clause, the Successful Bidder shall handover all documents/ executable/ HPSEDC data or any other relevant information to the HPSEDC in a timely manner and in proper format as per scope of this RFP and shall also support the orderly transition to another vendor or to the HPSEDC.

- 4. During the transition, the Successful bidder shall also support the HPSEDC on technical queries/support on process implementation or in case of any provision for future upgrades.
- 5. The HPSEDC's right to terminate the Contract will be in addition to the penalties / liquidated damages and other actions as deemed fit.
- 6. In the event of failure of the Successful Bidder to render the Services or in the event of termination of agreement or expiry of term or otherwise, without prejudice to any other right, the HPSEDC at its sole discretion may make alternate arrangements for getting the Services contracted with another vendor. In such a case, the HPSEDC shall give prior notice to the existing Successful Bidder. The existing Successful Bidder shall continue to provide services as per the terms of contract until a 'New Service Provider' completely takes over the work. During the transition phase, the existing Successful Bidder shall render all reasonable assistance to the new Service Provider within such period prescribed by the HPSEDC, at no extra cost, for ensuring smooth switch over and continuity of services. If an existing Successful bidder breach this obligation, they shall be liable for paying a penalty as provided in the Penalty Section of this document, which may be settled from the payment of invoices or Performance Bank Guarantee for the contracted period or by invocation of Performance Bank Guarantee. HPSEDC or the "Successful Bidder" can terminate the contract in the event of default of terms and conditions of this RFP or the contract by the other party by giving 1 month written notice.
- 7. Upon termination of this Contract due to any reason whatsoever or upon expiration of this Contract, all rights and obligations of the Parties hereunder shall cease, except (i) such rights and obligations as may have accrued on the date of termination or expiration, (ii) the obligation of confidentiality set forth herein, (iii) and any right which a Party may have under the Applicable Law.

5.4.2 Termination of contract for Convenience:

HPSEDC or the "Successful bidder" reserves the right to terminate, by prior written one month notice, the whole or part of the contract, at any time for its convenience. The notice of termination shall specify that termination is for the concerned party's convenience, the extent to which the performance of work under the contract is terminated, and the date upon which such termination becomes effective. However, the payment of pending invoices shall only be made after analyzing, including but not limited to, any claims, losses, damages, expenses or liabilities arising out of "Successful bidders" performance of work under this contract.

5.4.3 Termination of contract for Insolvency, Dissolution, etc.:

HPSEDC may at any time terminate the Contract by giving written notice to the Successful bidder, if the concerned "Successful bidder" becomes bankrupt or otherwise insolvent or in case of dissolution of firm/company or winding up of firm/company. In this event termination will be without compensation to the "Successful bidder" provided that such termination will not prejudice or affect any right of action or remedy, which has accrued or will accrue thereafter to the HPSEDC.

5.5 Exit Management

This Schedule sets out the provisions, which will apply on expiry or termination of the Term of the Agreement and/or earlier termination of the Service Agreement, and/ or the Service Level Agreement for any reasons whatsoever. In the case of termination of the Project implementation and/or Service Level Agreement due to illegality, the parties shall agree at that time whether, and if so during what period, the provisions of this Schedule shall apply. The parties shall ensure that their respective associated entities carry out their respective obligations set out in this Exit Management Schedule.

The Exit Management Period starts, in case of expiry of Contract, 6 months before the Contract ends or in case of earlier termination of Contract, on the date of service of termination orders to the Implementing Agency. The Exit Management Period ends on the date agreed upon by Himachal Pradesh State Electronics Development Corporation Limited or six months after the beginning of the Exit Management Period, whichever is earlier.

During the Exit Management Period, the Implementing Agency shall use its best efforts to deliver the Services. Payments during the Exit Management Period shall be made in accordance with the Terms of Payment Schedule.

5.6 Manpower Deployment

During the exit management period, the Implementing Agency shall deploy one Supervisor/Engineer, full time and on-site, to provide continued project support for successful project execution.

5.7 Transfer of Project Assets

2.1 Before the expiry of the Exit Management Period, all Project Assets including the hardware, software, system software documentation and any other infrastructure shall have been renewed and cured of all defects and deficiencies as necessary so that the

Project is compliant with the specifications and standards set forth in the Agreement, RFP, and any other amendments made during the Term of the Agreement.

- 2.2 Before the expiry of the exit management period, the Implementing Agency will deliver relevant records and reports pertaining to the Project and/or Himachal Pradesh State Electronics Development Corporation Limited and its design, implementation, operation, and maintenance including all operation and maintenance records and manuals pertaining thereto and complete as on the divestment date.
- 2.3 The Implementing Agency will provide the Himachal Pradesh State Electronics Development Corporation Limited with a complete and up to date list of the Assets to be transferred to Himachal Pradesh State Electronics Development Corporation Limited within 30 days of start of Exit Management Period.
- 2.4 The outgoing Implementing Agency will pass on to Himachal Pradesh State Electronics Development Corporation Limited and/or to the replacement Implementing Agency (if engaged by Himachal Pradesh State Electronics Development Corporation Limited), the subsisting rights in any leased properties/ licensed products on terms not less favorable to Himachal Pradesh State Electronics Development Corporation Limited/replacement Implementing Agency, than that enjoyed by the outgoing Implementing Agency.
- 2.5 Even during the Exit Management period, the Implementing Agency's team and/or all third parties appointed by the Implementing Agency shall continue to perform all their obligations and responsibilities as stipulated under this Service Agreement, and as may be proper and necessary to execute the scope of work under the terms of the Service Agreement in order to execute an effective transition and to maintain business continuity. 2.6 The Implementing Agency complies with all other requirements as may be prescribed under applicable laws to complete the divestment and assignment of all the rights, title and interest of the Implementing Agency in this Project free from all encumbrances absolutely and free of any charge or tax to Himachal Pradesh State Electronics Development Corporation Limited or its nominated agencies or the replacement Implementing Agency as the case may be.

5.8 Payments during Exit Management Period

3.1 Payment to the outgoing Implementing Agency shall be made to the tune of last set of rendered Services / deliverables (including parts thereof) as cited in the terms of Payment Schedule, subject to Service Level Agreement requirements. Without prejudice to any other rights, Himachal Pradesh State Electronics Development Corporation Limited may retain such amounts from the payment due and payable by Himachal Pradesh State Electronics Development Corporation Limited to the Implementing Agency as may be required to offset any losses, damages or costs incurred by Himachal Pradesh State Electronics Development Corporation Limited as a result of the termination of

Implementing Agency or due to any act/omissions of the Implementing Agency or default on the part of Implementing Agency in performing any of its obligations with regard to this Service Agreement.

3.2 Nothing herein the Exit Management Schedule shall restrict the right of Himachal Pradesh State Electronics Development Corporation Limited to invoke the Bank Guarantee and other Guarantees furnished hereunder, enforce the Deed of Indemnity and pursue such other rights and/or remedies that may be available to Himachal Pradesh State Electronics Development Corporation Limited under law.

5.9 Knowledge Transfer

During the Exit Management period:

- 4.1 The selected Implementing Agency will be required to provide necessary handholding and transition support to Himachal Pradesh State Electronics Development Corporation Limited's staff or its nominated agency or replacement Implementing Agency. The handholding support will include but not be limited to, conducting detailed walkthrough and demonstrations for the IT Infrastructure, handing over all relevant documentation, addressing the queries/clarifications of the new agency with respect to the working/performance levels of the infrastructure, conducting training sessions etc.
- 4.2 The Implementing Agency shall permit Himachal Pradesh State Electronics Development Corporation Limited and/or any replacement Implementing Agency to have reasonable access to its employees and facilities as reasonably required by Himachal Pradesh State Electronics Development Corporation Limited to understand the methods of delivery of the Services employed by the Implementing Agency and to assist appropriate knowledge transfer.

5.10 Transfer of Confidential Information and Data

- 5.1 The Implementing Agency will promptly on the commencement of and during the exit management period supply to Himachal Pradesh State Electronics Development Corporation Limited the following:
- i. Documentation relating to Himachal Pradesh State Electronics Development Corporation Limited's Intellectual Property Rights;
- ii. Himachal Pradesh State Electronics Development Corporation Limited data and Confidential Information;
- iii. All current and updated Project data as is reasonably required for the purposes of Himachal Pradesh State Electronics Development Corporation Limited or its nominated agencies transitioning the Services to its replacement Implementing Agency or its nominated agencies in a readily available format nominated by Himachal Pradesh State Electronics Development Corporation Limited;

- iv. All other information (including but not limited to documents, records and Agreements) held or controlled by the Implementing Agency which they have prepared or maintained in accordance with the Master Services Agreement, the Project implementation, and the Service Level Agreement relating to any material aspect of the Services (whether provided by the Implementing Agency) or as is reasonably necessary to effect a seamless handover of the Project to Himachal Pradesh State Electronics Development Corporation Limited or its nominated agencies or its replacement Implementing Agency.
- 5.2 Before the expiry of the exit management period, the Implementing Agency shall deliver to Himachal Pradesh State Electronics Development Corporation Limited all new or updated materials from the categories set out above and shall not retain any copies thereof.
- 5.3 For the purposes of this Schedule, anything in the possession or control of Implementing Agency or its associated entity is deemed to be in the possession or control of the Implementing Agency.
- 5.4 Before the expiry of the exit management period, unless otherwise provided under the Agreement, Himachal Pradesh State Electronics Development Corporation Limited shall deliver to the Implementing Agency all forms of Implementing Agency Confidential Information, which is in the possession or control of Himachal Pradesh State Electronics Development Corporation Limited or its users.

5.11 Employees

- 6.1 Promptly on reasonable request at any time during the Exit Management Period, the Implementing Agency shall, subject to applicable laws, restraints and regulations (including in particular those relating to privacy) provide to Himachal Pradesh State Electronics Development Corporation Limited a list of all employees (with job titles) of the Implementing Agency dedicated to providing the Services at the commencement of the exit management period;
- 6.2 Where any national, regional law or regulation relating to the mandatory or automatic transfer of the Contracts of employment from the Implementing Agency to Himachal Pradesh State Electronics Development Corporation Limited or its nominees, or are placement Implementing Agency ("Transfer Regulation") applies to any or all of the employees of the Implementing Agency, then the parties shall comply with their respective obligations under such Transfer Regulations.
- 6.3 To the extent that any Transfer Regulation does not apply to any employee of the Implementing Agency, Himachal Pradesh State Electronics Development Corporation Limited, or its replacement Implementing Agency may make an offer of employment or

Contract for services to such employee of the Implementing Agency and the Implementing Agency shall not enforce or impose any contractual provision that would prevent any such employee from being hired by Himachal Pradesh State Electronics Development Corporation Limited or any replacement Implementing Agency.

6.4 Promptly on reasonable request at any time during the Exit Management Period, the Implementing Agency's hall, facilitate training and knowledge transfer for Himachal Pradesh State Electronics Development Corporation Limited and/or any replacement Implementing Agency as reasonably required for understanding the methods of delivery of the Services employed by the Implementing Agency.

5.12 Transfer of Certain Agreements

On request by the Himachal Pradesh State Electronics Development Corporation Limited, the Implementing Agency shall effect such assignments, transfers, licenses and sublicenses as the Himachal Pradesh State Electronics Development Corporation Limited may require in favor of Himachal Pradesh State Electronics Development Corporation Limited, or its replacement Implementing Agency in relation to any equipment lease, maintenance or service provision agreement between Implementing Agency and third party lessors, vendors, and which are related to the Services and reasonably necessary for the carrying out of replacement services by Himachal Pradesh State Electronics Development Corporation Limited or its replacement Implementing Agency.

5.13 Rights of Access to Premises

At any time during the Exit Management Period, where Assets are located at the Implementing Agency's premises, the Implementing Agency will be obliged to give reasonable rights of access to (or, in the case of Assets located on a third party's premises, procure reasonable rights of access to) Himachal Pradesh State Electronics Development Corporation Limited, and/or any replacement Implementing Agency in order to make an inventory of the Assets. The Implementing Agency shall also give the Himachal Pradesh State Electronics Development Corporation Limited or its nominated agencies, or any replacement Implementing Agency right of reasonable access to the Implementing Agency's premises and shall procure Himachal Pradesh State Electronics Development Corporation Limited or its nominated agencies and any replacement Implementing Agency rights of access to relevant third party premises during the exit management period and for such period of time following termination or expiry of the Agreement as is reasonably necessary to migrate the services to Himachal Pradesh State Electronics Development Corporation Limited or its nominated agencies, or a replacement Implementing Agency.

5.14 Exit Management Plan

- 1. The Implementing Agency shall provide Himachal Pradesh State Electronics Development Corporation Limited with an Exit Management plan, which shall deal with at least the following aspects of exit management in relation to the Agreement as a whole and in relation to the Project implementation, and the Service Level Agreements.
- a) A detailed program of the transfer process that could be used in conjunction with a replacement Implementing Agency including details of the means to be used to ensure continued provision of the Services throughout the transfer process or until the cessation of the Services and of the management structure to be used during the transfer;
- b) Plans for the communication with any of the Implementing Agency's staff, suppliers, customers and any related third party as are necessary to avoid any detrimental impact on Himachal Pradesh State Electronics Development Corporation Limited's operations as a result of undertaking the transfer;
- c) (if applicable) Propose arrangements for the segregation of the Implementing Agency's networks from the networks employed by Himachal Pradesh State Electronics Development Corporation Limited in general and identification of specific security tasks necessary at termination;
- d) Plans for provision of contingent support to Himachal Pradesh State Electronics Development Corporation Limited and replacement Implementing Agency for a reasonable period after transfer.
- 9.2 This Exit management plan shall be furnished in writing to Himachal Pradesh State Electronics Development Corporation Limited or its nominated agencies within 90 days from the date of signing of the Agreement.

5.15 Transfer Cost

The Implementing Agency shall pay all costs (transfer costs, stamp duty etc.) as applicable to meet the requirements of this Exit Management Schedule.

5.16 Loss of Property and/or Life

- 1. Any loss of property and / or life during preparations of the event and the event itself would be borne entirely by the Successful Bidder and HPSEDC shall not be held liable for any claims. The Successful Bidder shall be responsible for the payments arising out of any Third Party claims. The Successful Bidder shall procure insurance for meeting such liabilities at his own expense.
- 2. The Successful bidder shall maintain the ecological balance by preventing deforestation, water pollution and defacing of natural landscape.

3. The Successful bidder shall abide by all the acts/laws prevalent in the country

5.17 Representations and Warranties

- 1. The Successful Bidder represents and warrants that all services performed under this Agreement shall be of professional quality conforming to generally accepted industry practices. If in the opinion of the HPSEDC, any work done or supply made or service rendered by the successful bidder is deficient in any manner in comparison to the prescribed standards, HPSEDC shall be at liberty to impose penalty on the successful bidder.
- 2. The Successful Bidder shall be liable to pay the HPSEDC for any direct loss or damage accrued or likely to accrue due to deficiency in Services rendered by it, as per cost fixed based on relevant documents.
- 3. The Parties hereto agree that in case of negligence or willful misconduct on the part of the Successful Bidder or on the part of any person or firm acting on behalf of the Successful Bidder in carrying out the Services, the Successful Bidder, with respect to damage caused to the HPSEDC's property, shall be liable to pay the HPSEDC: (i) for any indirect or consequential loss or damage; and (ii) for any direct loss or damage.

5.18 Force Majeure

- 1. The Successful Bidder shall not be liable for forfeiture of its PBG or termination of contract for default if and to the extent that delays in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.
- 2. "Force Majeure" means an event beyond the control of the Successful Bidder and not involving his fault or negligence, and unforeseeable. Such events may include, but are not restricted to, acts of wars or revolutions, riot or commotion, earthquake, fire, floods, epidemics, and quarantine restrictions.
- 3. If a Force Majeure situation arises, the Successful Bidder shall promptly notify the HPSEDC in writing of such condition and the cause thereof. Unless otherwise directed by the HPSEDC in writing, the Successful Bidder shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

5.19 Resolution of Disputes

If any dispute arises between the parties Jurisdiction of Shimla Courts, then these would be resolved in following ways:

- 1. Amicable Settlement: Performance of the Contract is governed by the terms and conditions of the Contract, however at times dispute may arise about any interpretation of any term or condition of Contract including the scope of work, the clauses of payments etc. In such a situation either party of the contract may send a written notice of dispute to the other party. The party receiving the notice of dispute will consider the Notice and respond to it in writing within 21 days after receipt. If that party fails to respond within 21 days, the decision of the Government shall be final and conclusive who shall be the sole mediator to settle any disputes between the parties. If the dispute cannot be amicably settled within 1 month, then the second Sub clause of resolution of disputes shall become applicable.
- 2. Arbitration: In case dispute arising between the parties, which has not been settled amicably, the "Successful bidder" can request MD, HPSEDC to refer the dispute for Arbitration under the Arbitration and Conciliation Act, 1996 (as amended up to date). Such disputes shall be referred to the Arbitrator which shall be decided/appointed by the MD, HPSEDC. The Indian Arbitration and Conciliation Act, 1996 (as amended up to date) and any statutory modification or reenactment thereof, shall apply to these arbitration proceedings.
- 3. Arbitration proceedings will be held as per the arbitrator's convenience. The decision of the arbitrator shall be final and binding upon both parties. All arbitration awards shall be in writing, in English language and shall state the reasons for the award.
- 4. This Contract and the rights and obligations of the Parties shall remain in full force and effect, pending the Award in any arbitration proceedings hereunder

5.20 Legal Jurisdiction

All legal disputes between the parties shall be subject to the exclusive jurisdiction of the Courts situated in Shimla, Himachal Pradesh, India only.

5.21 Other Information

1. The successful bidder will have to get all the creative's, scripts, videos or any material, approved from the HPSEDC; failure to which will lead to Penalty and legal consequences.

- 2. The ownership of any creative content / props / material etc such as print / outdoor, meaning the Intellectual Property / for which HPSEDC has paid will at all-time rest with HPSEDC and the Agency/copywriter/photographer/ producer, etc. will have no proprietary or other rights in respect of the same. This would include full copyright for all time use of the images used in the creative and publicity material. The Successful Bidder shall at no time, use the same content, props, materials etc. in any other projects without the written consent of the HPSEDC herein or any other designated authorized officials.
- 3. The Successful Bidder will be responsible for copyright issues concerning usage of images, footage, text material, etc. obtained through various sources. HPSEDC will not be a party to any disputes arising out of copyright violation by the Successful Bidder.
- 4. The Successful Bidder will be responsible for obtaining any permission that may be required for undertaking work as detailed in this RFP document. HPSEDC may assist the Successful Bidder in this regard, wherever possible.
- 5. The Successful Bidder will at no time resort to plagiarism. HPSEDC will not be a party to any dispute arising on account of plagiarism resorted to by the Successful Bidder. The Successful Bidder will indemnify HPSEDC against any claim, laws, damages, etc. arising out of the Successful Bidder having resorted to plagiarism or violation & IPR of any third party.
- 6. Any notice or other communication to be given by any Party to the other Party under or in connection with the matters contemplated by this Contract shall be in writing.
- 7. The Services shall be performed at the site of the Project and at such locations as are incidental thereto.
- 8. The Parties undertake to act in good faith with respect to each other's rights under this Contract and to adopt all reasonable measures to ensure the realization of the objectives of this Contract.
- 9. Without prejudice to the generality of the provisions herein, on matters not covered by this Contract, the provisions of RFP shall apply.

6. Service Level Agreement

Service Level Agreement (hereinafter referred to as SLA) is made to clearly state and define the levels of service that shall be provided by the Selected Bidder to the HPSEDC for the duration specified in this Contract. The HPSEDC may regularly review the performance of the services being provided by the Selected Bidder and the effectiveness of this SLA. Any delays will cause penalties that will be borne by the service provider.

6.1 Penalties

Without prejudice to any other right or remedy that may be available to the HPSEDC here under or in law otherwise, the following penalty(s) may be levied on the Successful Bidder as under:-

- 1. Liquidated Damages for delay (such as in case of any error or variation or deficiency is detected in the services rendered by the successful bidder, In case of delay in completion of work, failure in approval of creative's, scripts, videos, project plans etc.), liquidated damages not exceeding an amount equal to 1% (one percent) of the Contract price per week, subject to a maximum of 10% (ten percent) of the Contract price will be imposed and shall be recovered by appropriation from the PBG or otherwise, where the decision of MD, HPSEDC will be considered final and conclusive.
- 2. In case, any amount of Liquidated Damages (L/D) is recovered from PBG, the successful bidder shall replenish the PBG to original value within 30 days of recovery.
- 3. The bidder shall maintain a minimum of 99% uptime for the software during the O & M phase.

Penalty in case of any downtime in Software:

- A total of 0.2% of the total contract value will be deducted for any incident related to software after the incident fails to meet required SL/ Response Time as detailed in the table below.

Definition of Incident:

Type of Service	Metric	Basis of Measurement	Response Time (Required Service Level)		Expected Action / Remarks
As per Problem	Initial Respons	Call log details / SMS / Server	SMS / Server mins		Initial review for Category, Priority and
Report (PR)	e	logs	High	2 hrs	whether the PR has sufficient information to understand the
			Mediu m	3 hrs	problem Assignment to a respective
			Low	4 hrs	individual for analysis Respond to initiator informing of assignment for further analysis
As per Problem	Complet e	Call log details / EMS / Server	Critical	1 hr	Bring a system in the state that can serve
Report (PR)	Analysis /	logs	High	4 hrs	users, at full capacity without any service
	Resoluti on		Mediu m	8 hrs	disruption in quality & uptime. Detail analysis of Problem
			Low	10 hrs	Report and root cause analysis of, potential risk/impact, effort estimate for resolution and closing of the problem should be submitted.

Critical: Service Disruption in the working of any Software Component because of which the Bus tour cannot start.

High: Service Disruption in the working of any Software Component because of which the Bus tour can run but with incomplete functionality.

Medium: Service Disruption in the working of any Software Component because of which the experience of the viewers will be deteriorated.

Low: Service Disruption in the working of any Software Component that does not stop the show to start.

5. The bidder shall maintain the bus in running condition at all time and in case of any major breakdown the bidder has to get the bus up and running within 24-48 hours failing which will lead to the penalty. Penalty will be decided by HPSEDC on the basis of the loss accumulated per day and will be recovered from the due amount or the performance guarantee.

6.2 IPR & Source Code

The ownership of source code of all applications developed, multimedia e-content, etc. shall be assigned and transferred to Himachal Pradesh State Electronics Development Corporation Limited with all ownership rights of the software/source code and all related tangible and intangible material and documents for its unlimited, unrestricted use within the state of Himachal Pradesh at unlimited number of locations, machines, computers, gadgets etc.

IPR and source code for the Content developed under this project, shall have unrestricted and unlimited usage and applicability after the closure of the project, and the same should be handed over to Himachal Pradesh State Electronics Development Corporation Limited on Free of Cost basis after the successful completion of project. All material related to the project shall be treated as confidential information by the Implementing Agency, including any developments on Commercial off the shelf software/ solution.

7. Annexures

7.1 Self-Declaration on not being blacklisted (To be scanned and uploaded)

Date: XX/XX/XXXX

To,

The Managing Director, H.P. State Electronics Development Corporation Ltd., 1st Floor, IT Bhawan, Mehli, Shimla- 171013

Subject: Declaration on not being blacklisted by any State/Central Government department, agency, corporation, urban local body, or Quasi Government agencies of PSU

Dear Sir,

I/We hereby declare that as of date, (Name of the firm/company) is not blacklisted by any state/central /Local Government or quasi-government entity, department, agency, corporation, body, or PSU in India for breach of any applicable law or violation of regulatory prescriptions or breach of Agreement/Contract.

Sincerely Yours,

(Signature of Authorized Signatory) Name:

Title:

7.2	Experience	of ex	xecuting	and	successfully	/ com	pleting	work

On Company Letterhead

Date: XX/XX/XXXX

To,

The Managing Director, H.P. State Electronics Development Corporation Ltd., 1st Floor, IT Bhawan, Mehli, Shimla- 171013

Subject: Experience of executing and successfully completing work along with the work order and completion certificate duly signed by Statutory Auditor/ CA/ Company Secretary.

Dear Sir,

This is to certify that I/We have worked and successfully completed the below mentioned works. Work order and completion certificate for these projects is attached for your ready reference.

			Name of	Brief			
			the	Descriptio	Value of		
	Name of		Purchase	n of the	service in		
S.No.	the work	Location	r	work	INR	Start Date	End Date

Sincerely Yours, (Signature of Authorized Signatory) Name: Title:

7.3 Self-Declaration
To be Notarised
Date: XX/XX/XXXX
То,
The Managing Director, H.P. State Electronics Development Corporation Ltd., 1st Floor, IT Bhawan, Mehli, Shimla- 171013
Subject: Declaration on correctness of all the documents and neither failed to perform on any agreement, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial pronouncement or arbitration award against the Applicant, nor been expelled from any project or agreement or have had any agreement terminated for breach.
Dear Sir,
I/We hereby declare that as of date, (Name of the firm/company) is neither failed to perform on any agreement, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial pronouncement or arbitration award against the Applicant, nor been expelled from any project or agreement or have had any agreement terminated for breach and declare that all the documents/information given in respect of the above tender are correct and true to my/we best knowledge.
Sincerely Yours,
(Signature of Authorized Signatory)
Name:
Title:

7.4 Format for Performance Bank Guarantee (Hard copy required post contract is awarded)

Performance Bank Guarantee (Draft Format)

To,

The Managing Director,
H.P. State Electronics Development Corporation Ltd.,
1st Floor, IT Bhawan, Mehli, Shimla- 171013

Dear Sir,

PERFORMANCE BANK GUARANTEE – For Request for Proposal for Selection of a Creative & Execution Company to set up Immersive Bus Simulator in transit of Rohtang Tunnel, Leh- Manali Highway, which includes conceptualizing, designing and execution.

WHEREAS

M/s. (name of Successful Bidder), a company registered under the Companies Act, 1956, having its registered and corporate office at (address of the Successful Bidder), (hereinafter referred to as "our constituent", which expression, unless excluded or repugnant to the context or meaning thereof, includes its successors and assigns), agreed to enter into a Contract dated (hereinafter, referred to as "Contract") with you for Request for Proposal for Selection of a Creative & Execution Company to set up Immersive Bus Simulator in transit of Rohtang Tunnel, Leh-Manali Highway, which includes conceptualizing, designing and execution.

We are aware of the fact that as per the terms of the Contract, M/s. (name of Successful Bidder) is required to furnish an unconditional and irrevocable Bank Guarantee in your favor for an amount of 10% of the Total Contract Value, and guarantee the due performance by our constituent as per the Contract and do hereby agree and undertake to pay any and all amount due and payable under this bank guarantee, as security against breach/ default of the said Contract by our Constituent.

In consideration of the fact that our constituent is our valued customer and the fact that he has entered into the said Contract with you, we, (name and address of the bank), have agreed to issue this Performance Bank Guarantee.

Therefore, we (name and address of the bank) hereby unconditionally and irrevocably quarantee you as under:

In the event of our constituent committing any breach / default of the said Contract, and which has not been rectified by him, we hereby agree to pay you forthwith on demand such sum/s not exceeding.....<in words> without any demur or protest.

Notwithstanding anything to the contrary, as contained in the said Contract, we agree that your decision as to whether our constituent has made any such default(s) / breach(es), as aforesaid and the amount or amounts to which you are entitled by reasons thereof, subject to the terms and conditions of the said Contract, will be binding on us and we shall not be entitled to ask you to establish your claim or claims under this Performance Bank Guarantee, but will pay the same forthwith on your demand without any protest or demur.

This Performance Bank Guarantee shall continue and shall remain in full force and effect hold good until, subject to the terms and conditions in the said Contract.

We bind ourselves to pay the above said amount at any point of time commencing from the date of the said Contract until

We further agree that the termination of the said Agreement, for reasons solely attributable to our constituent, virtually empowers you to demand for the payment of the above said amount under this guarantee and we would honor the same without demur.

We hereby expressly waive all our rights:

- i. Requiring to pursue legal remedies against the Department; and
- ii. For notice of acceptance hereof any action taken or omitted in reliance

hereon, of any defaults under the Contract and any resentment, demand, protest or any notice of any kind.

We the Guarantor, as primary obligor and not merely Surety or Guarantor of collection, do hereby irrevocably and unconditionally give our guarantee and undertake to pay any amount you may claim (by one or more claims) up to but not exceeding the amount mentioned aforesaid during the period from and including the date of issue of this guarantee through the period.

We specifically confirm that no proof of any amount due to you under the Contract is required to be provided to us in connection with any demand by you for payment under this guarantee other than your written demand.

Any notice by way of demand or otherwise hereunder may be sent by special courier, telex, fax, registered post or other electronic media to our address, as aforesaid and if sent by post, it shall be deemed to have been given to us after the expiry of 48 hours when the same has been posted.

If it is necessary to extend this guarantee on account of any reason whatsoever, we undertake to extend the period of this guarantee on the request of our constituent under intimation to you.

This Performance Bank Guarantee shall not be affected by any change in the constitution of our constituent nor shall it be affected by any change in our constitution or by any amalgamation or absorption thereof or therewith or reconstruction or winding up, but will ensure to the benefit of you and be available to and be enforceable by you during the period from and including the date of issue of this guarantee through the period.

Notwithstanding anything contained hereinabove, our liability under this Performance Guarantee is restricted to 10% of the Contract Value, and shall continue to exist, subject to the terms and conditions contained herein, unless a written claim is lodged on us on or before the aforesaid date of expiry of this guarantee.

We hereby confirm that we have the power/s to issue this Guarantee in your favor under the Memorandum and Articles of Association / Constitution of our bank and the undersigned is / are the recipient of authority by express delegation of power/s and has/ have full power/s to execute this guarantee under the Power of Attorney issued by the bank in your favor.

We further agree that the exercise of any of your rights against our constituent to enforce or forbear to enforce or any other indulgence or facility, extended to our constituent to carry out the contractual obligations as per the said Contract, would not release our liability under this guarantee and that your right against us shall remain in full force and effect, notwithstanding any arrangement that may be entered into between you and our constituent, during the entire currency of this guarantee.

Notwithstanding anything contained herein:

This Performance Bank Guarantee shall be valid only till

We are liable to pay the guaranteed amount or part thereof under this Performance Bank Guarantee only and only if we receive a written claim or demand on or before

Any payment made hereunder shall be free and clear of and without deduction for or on account of taxes, levies, imports, charges, duties, fees, deductions or withholding of any nature imposts.

This Performance Bank Guarantee must be returned to the bank upon its expiry. If the bank does not receive the Performance Bank Guarantee within the above-mentioned period, subject to the terms and conditions contained herein, it shall be deemed to be automatically canceled.

This guarantee shall be governed by and construed in accordance with the Indian Laws and we hereby submit to the exclusive jurisdiction of courts of Justice in India for the purpose of any suit or action or other proceedings arising out of this guarantee or the subject matter hereof brought by you may not be enforced in or by such count.

Dated	this	. day	2022.
Yours faithfully,			
For and on behalf of t	he	. Bank,	
(Signature) Designati	on		
(Address of the Bank)		

Note: This guarantee will attract stamp duty as a security bond.

A duly certified copy of the requisite authority conferred on the official/s to execute the guarantee on behalf of the bank should be annexed to this guarantee for verification and retention thereof as documentary evidence in the matter.

Note: In case of additional order, separate Performance Bank Guarantee will have to be submitted/deposited by the selected bidder.

7.5 CV's of Key Personnel

<u> </u>	·	1		1
1. Proposed Position				
2. Name of Staff				
3. Date of Birth				
4. Nationality				
5. Educational Qualification				
	Qualificatio	Yea	Board/Institut	
S.No.	n	r	ion	
1				
2				
6. Employment Record:				
S.No.	From	То	Company Name	Designati on
1	1 10111		T tamo	
2				
C(i) Total Experience				
6(i). Total Experience				
6(ii). Permanent Employment with the Firm (Yes/No)				
6(ii)(a)If yes, how many years				
6(ii)(b)If no, what is the employment				
7. Relevant Experience:				
	Project	Rol		
S.No.	Name	е		
1				
2				

Certification:

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes my qualifications, my experience, and myself. I understand that any willful

mis- statement described herein may	lead to my	or firm o	disqualification/	dismissal, i	f
engaged.					

Date:

[Signature of staff member or authorized representative of the staff] Place:

7.6 Bid Security Declaration

Date: XX/XX/XXXX

To,

The Managing Director, H.P. State Electronics Development Corporation Ltd., 1st Floor, IT Bhawan, Mehli, Shimla- 171013

Dear Sir,

I/We undertake that:

I/We will not withdraw or modify the bids during the period of validity,

That in case the contract is awarded to me/us, I/We will sign the contact and submit a performance security before the deadline defined in the request for bids/request for proposals documents,

In case of default in any of the above ,I/we are liable to be debarred from participation in future tenders of HPSEDC for a period of 2 years.

Sincerely Yours, (Signature of Authorized Signatory) Name: Title:

7.7 Compliance Sheet

#	Item	Compliance (YES/NO)
	Supply of Electric bus Shell with the following specifications: Seating Capacity: Minimum 24 - 25, 2 fast chargers, Provision of air conditioning, Low NVH, Air Suspension, Fully Electric, Nominal Operating range in single charge 180 Km, Minimum Ground Clearance should be 200mm, Minimum warranty of 6 Years or 450000 km whichever is earlier, Equipped with Fire Extinguisher, Wheelbase of 4200mm - 4950mm, Length of upto 9500mm and 100% Charging time of not more than 30 - 45 minute.	
1	The bus should be made in India and the Original Equipment Manufacturer (OEM) should have relevant capability as per incentive eligibility assessment procedure under FAME scheme bus Original Equipment Manufacturer (OEM) should be engaged in manufacturing of Electric buses in India and should have in business of manufacturing and selling of buses / vehicles for atleast the last 3 years and should have sold atleast 100 Electric buses and Electrical energy consumption should be less than 0.80 Kwh/km and Electrical Regeneration is required bus should comply with the latest provision of the Central Motor Vehicle Act, 1989 (CMVR), Motor vehicle Act, 1988 (MVA), HP Motor Vehicle Rule in this behalf along with any and all the amendments therein and other statutory and legal requirements as applicable on the date of delivery/registration of bus with state transport of Himachal Pradesh The bus should be in compliance with the FAME Scheme including carriage of material in all lead and lift.	
2	Supply Installation, Testing & Commissioning of extra battery bank of the same make as supplied by bus OEM to run the show equipment as mentioned in the DPR	

3	Physical modification of the bus will be done as per: Maximum dimensions consideration for fleet movement inside bus (length and width restrictions may apply), fixing of screens involving consideration of Maximum weight (laden and unladen) Stability, Accessibility. Physical changes, window removal, welding & fixing of other structures installation of Display Unit on window on a slideway, IP67 housing & wiring, Audio & amplifier Installation and provision of Push Back Seat and making sure the bus is complete in all aspect and in running condition for height above sea level of more than approx 10000 feet with the required facility and delivered at site Manali as desired by HPSEDC.	
4	Measuring and 3D scanning of bus using industry grade mm accurate 3D scanner for approval.	
5	3D creation of bus with the help of scanned data and making proper modifications and doing dimensioning. A proper plan for modification has to be submitted for approval.	
6	Making of an electrical layout diagram of the bus for planning of installation of a new equipment.	
7	Laying out and Supply of electrical wires inside the bus using IP66 & IP67 wire housing with Heat Resistant & Flame Retardant (HRFR) Cable.	
8	Supply, installation, testing and commissioning of transparent screens to cover all the sides of the bus 22sqm (i.e., front, sides, corner and top of bus) having : Minimum area of 22 sqm or more with high PPI (Pixel Per inch) having minimum 3840 * 2160 Resolution with 60 - 65 % transparency with minimum bezel and refresh Rate of 50 hertz 1 HDMI port and supported aspect ratio of 16:9. Power requirement of 240 V AC, 60 - 90 Watt for creating a smooth transition from real world to virtual 3D world. It should be as per DST/BIS standards.	
9	Supply, installation, testing and commissioning of Smart Switchable Glass Film screen.	
10	Supply, installation, testing and commissioning of HDMI Cable from reputed suppliers with 24K gold plated connector: It must have streaming support of up to 4k videos with a wrap speed of 10 GB/s or more along with a inbuilt repeater.	
11	Supply, installation, testing and commissioning of DP to HDMI Converter.	

Supply, installation, testing and commissioning of 4U Rack mountable Display Server of i9/Xeon Latest Generation with Lifetime OS license, 64 GB RAM of DDR4 3200 Mhz, GPU to drive 4 X 4K output with Ray Tracing Support, should be supplied along with sync card if multiple 12 GPU is used, 1 TB SSD having following interface SATA 6Gb/s should be compatible with SATA 3Gb/s, SATA 1.5Gb/s interfaces having Sequential Read/Write speeds up to 550/520 MB/s respectively, Power: 260 Watt, 240 V AC. It should be as per DST/BIS standards. Supply, installation, testing and commissioning of Rack mountable Application Server of i9/Xeon Latest Generation with Lifetime OS license, 64 GB RAM of DDR4 3200 Mhz, GPU to drive 2 Output with Ray Tracing Support, 1 TB SSD having following interface SATA 6Gb/s should be compatible with SATA 3Gb/s SATA 1.5Gb/s interfaces having Sequential Read/Write speeds up to 550/520 MB/s respectively, Power: 260 Watt, 240 V AC. It should be as per DST/BIS standards. Supply, installation, testing and commissioning of Shock Proof Server Rack with Shock Proof of 22U 600X600mm having PDU 6 Socket, 4 14 Cooling Fan, Static Loading 600 Kgs, 19" International standard, Material SPCC Quality Cold Rolled Sheet, Powder coating Frame RAL 7035 Doors RAL 7016. Supply, installation, testing and commissioning of industrial grade location sensor for mapping the 3D VR content with the movement calculation of the bus in real time with IP66 & IP67 Housing having max acceleration detection of 300 [m/s2] minimum velocity detection of 5000 meter /minute with maximum power requirement of 24 DC of Industrial Grade make only. Supply, installation, testing and commissioning of IMU sensor having 6 Degree of Freedom (DOF), Gyroscope Angular rate range of -245 to 245 deg/s, Accelerometer acceleration rate range of -60 to +60 m/s2, pitch & roll range of -60 to +60 degree for mapping the 3D VR content with gravitational and inertia based displacements of the bus in real time.

17	Supply, installation, testing and commissioning of industrial grade OBD (On-board diagnostics) for data transfer. The OBD(On-board diagnostics) specifications must include wired ability to read data streams and freeze Frame, oil light reset, SAS (Steering Systems and Suspension Systems), SRS (Shock Response Spectrum), DPF(Diesel particulate filters), EPB(Electric Park Brake), TPMS (Tire-pressure monitoring system), battery check function of Industrial Grade make only.
18	Supply, installation, testing and commissioning of Compact Two Way 8"" Loudspeaker System having Frequency Range: 58 Hz - 20 kHz (-10 dB), Frequency Response: 68 Hz - 19 kHz (±3 dB), Coverage Pattern- 90° x 50°, System Sensitivity (dB-SPL, 1W @ 1m)-92 dB, Maximum SPL: 113 dB, Nominal, Impedance: 8 Ohms, Power Handling (Program):500W, Wall Mount Bracket for above speakers.
19	Supply, installation, testing and commissioning of Dual 10"" Compact Subwoofer with Dual 10"" Subwoofer, Frequency Range 40 Hz - 220 Hz, Nominal Impedance 8Ω, Power Rating: 400W cont., Sensitivity (1W, 1m) 95 dB, Max SPL 122 dB, 45 Hz, 24 dB/oct high-pass filter, Safety Agency ROHS-compliant.
20	Supply, installation, testing and commissioning of 6.5" Premium In-Wall Speakers with: Frequency Range: 38 Hz - 20 kHz (-10 dB), Power Rating: 200 W Peak Sensitivity (1W, 1m): 88 dB SPL, Impedance: 8 ohms, 3rd order (18 dB/oct) Low Pass and 3rd order (18 dB/oct) High Pass, Optimum Air Cavity Behind Speaker 20 to 40 liters with Rough-In Frame for above speakers.
21	Supply, installation, testing and commissioning of Four-channel, 600W @ 4Ω Analog Power Amplifier, 70V/100V with 600 W x 4 channels at 4 and 8 ohms/100V/70V or better, Voltage Gain :34 dB, Frequency Response 20 Hz - 20 kHz (at 1 W), Signal-to-Noise Ratio Analog Input : 104 dB, Damping Factor :> 1000, 3 nos of RJ45 port 1 for data and 2 for Digital audio transmission in redundancy concept, Integrated 8 band EQ , Limiter , Crossover and Delay.

22	Supply, installation, testing and commissioning of Two-channel, 300W @ 4Ω Analog Power Amplifier, 70V/100V, 300 W x 2 channels at 4 and 8 ohms/100V/70V or better, Voltage Gain :34 dB, Frequency Response 20 Hz - 20 kHz (at 1 W), Signal-to-Noise Ratio Analog Input : 104 dB, Damping Factor :> 1000, 3 nos of RJ45 port 1 for data and 2 for Digital audio transmission in redundancy concept, Integrated 8 band EQ , Limiter , Crossover and Delay.	
23	Supply, installation, testing and commissioning of 4 x 4 Networked Digital Signal Processor DSP with 4 inputs and 4 outputs, 12 Control Inputs and 6 Logic Outputs for GPIO Integration, 48V phantom power on all analog inputs, THD: <0.01% 20Hz to 20KHz, +10dBu output, Crosstalk: <-75dB, Open architecture software configurable, Separate logic processing power, 2 digital audio bus RJ 45 Port 1 Ethernet port for Monitoring and configuration.	
24	Supply, installation, testing and commissioning of Four Button Zone Selector and Volume Control having 1 Programmable Push/Rotary Encoder, 1 Programmable Encoder Ring (Multicolored), 4 Programmable Buttons (Multicolored), 1 Programmable 64x128 Pixel LCD (Multicolored), Sleep Function, POE port, programmable LCD Screen.	
25	Supply, installation, testing and commissioning of wireless keyboard and mouse.	
26	Supply, installation, testing and commissioning of Router with Dual Channel 2.4 Ghz & 5Ghz having data speed of 2.53 Gbps, with Wireless 802.11a/b/g/n/ac. It should be as per DST/BIS standards.	
27	Supply, installation, testing and commissioning Ethernet switch with 24 Port, 100 Mbps, 240 Volts, 6 Watt Power.	
28	Supply, installation, testing and commissioning of CAT 6 Cable for connections.	

CCTV Cameras Supply, installation, testing and commissioning - 2Mp Bullet Camera Indoor/Outdoor, 1/2.8" progressive scan CMOS BLC/3D DNR/HLC - 1920 × 1080@30fps - Up to 40 m IR range - 2.8 mm/4 mm/6mm fixed lens IP67 - DVR along with 5 TB Hard disk Inside bus It should be as per DST/BIS standards. Supply, installation, testing and commissioning of EVSE (Electric Vehicle Supply Equipment) for charging of 2 Wheeler, 3 Wheeler & 4 Wheeler having charger of following connector type: Combined Charging System (CCS) (min 50 kW) with 1 CG Connector Gun) 30 CHArge de MOve (CHAdeMO) (min 50 kW) with 1 CG (Connector Gun) Bharat DC-001 (15 kW) with 1 CG (Connector Gun) Bharat AC-001(10 kW) with 3 CG (Connector gun) of 3.3 kW per unit. The charger should be as per DST/BIS standards.

Financial Bid

8.1 Financial Bid - I

Minimum 5 years of warranty for all hardware is required.

ABS	STRACT OF Cost Price				
	ME OF WORK- PROPOSED IMMERSIVE GROUP VIR		ALITY	/ TOU	R IN
S.	Item Description	Quantit y	Unit	Rate inc GST	Amo unt (inc GST)
Α	BUS				
1	Supply of Electric bus Shell with the following specifications: Seating Capacity: Minimum 24 - 25, 2 fast chargers, Provision of air conditioning, Low NVH, Air Suspension, Fully Electric, Nominal Operating range in single charge 180 Km, Minimum Ground Clearance should be 200mm, Minimum warranty of 6 Years or 450000 km whichever is earlier, Equipped with Fire Extinguisher, Wheelbase of 4200mm - 4950mm, Length of upto 9500mm and 100% Charging time of not more than 30 - 45 minute. The bus should be made in India and the Original Equipment Manufacturer (OEM) should have relevant capability as per incentive eligibility assessment procedure under FAME scheme bus Original Equipment Manufacturing of Electric buses in India and should have in business of manufacturing and selling of buses / vehicles for atleast the last 3 years and should have sold atleast 100 Electric buses and Electrical energy consumption should be less than 0.80 Kwh/km and Electrical Regeneration is required, bus should comply with the latest provision of the Central Motor Vehicle Act, 1989 (CMVR), Motor vehicle Act, 1988 (MVA), HP Motor Vehicle Rule in this behalf along with any and all the amendments therein and other statutory and legal requirements as applicable on the date of delivery/registration of bus with state transport of Himachal Pradesh The bus should be in compliance with the FAME Scheme including carriage of material in all lead and lift.	1	per unit		

H.P. State Electronics Development Corporation Ltd.

В	CONTENT			
2	Research about cultural heritage of Himachal, visiting tourist places for recce, 360 degree shoot of various tourist places along with Drone shoot.		Job	
3	Manpower deployment for Planning, Concept Development, clarifying requirements, Concept generation, Concept Selection, System level designing, Detail Designing, Testing & refining, Production Ramp-up.		Job	
4	Manpower Recruitment and Deployment for design and development of Screen playing of markup, Aspect ratio determination, sketching subject with background, planning arrow and camera movement, shot planning, finalizing and submission for approval.	1	Job	
5	Manpower Recruitment and Deployment for development of Logline crafting, Treatment writing, storyline development, Plot and Outline, First draft for approval, Rewriting based on feedback.	1	Job	
6	Renting of a recording studio and manpower deployment for scripting, dubbing, editing, and production. Selection of National Award winner voiceover Artist for Recording of Voiceover.	1	Job	
7	Manpower deployment for development of music story line, Recording a Demo, Rehearsals, Basic Tracks, Overdubbing, S Editing Music, Music Mixing Part 1, Music Mixing Part 2, Music Mixing Part 3, Mastering, and final production.		Job	
8	Manpower deployment for development of Subdivision/Box modeling, Spline/NURBS modeling, Image & surface based Modelling, Procedural modelling, digital modelling, sub-division modelling. The Use of all the above process will be to create 3D Assets. Use of Depth sensors will be to scan monuments for recreation of 3D Asset. Recreation of 3D assets from images taken on site. Proper Texturing for creating real life like 3D models. Close still shots of texture of per unit monuments and object being modelled.	1	Job	
9	Deployment of Manpower for development of Rigging, Animation, Lighting, Camera Setting, Rendering, Compositing and Special VFX, Music and Foley, Editing and Final Output.	1	Job	

10	Deployment of Manpower for designing and development of new Graphics for various scenes, editing of videos and images used collecting from recce, re-creation of new images and videos.	1	Job
С	HARDWARE		
11	Supply Installation, Testing & Commissioning of extra battery bank of the same make as supplied by bus OEM to run the show equipment as mentioned	1	per unit
12	Physical modification of the bus will be done as per: Maximum dimensions consideration for fleet movement inside bus (length and width restrictions may apply), fixing of screens involving consideration of Maximum weight (laden and unladen) Stability, Accessibility. Physical changes, window removal, welding & fixing of other structures installation of Display Unit on window on a slideway, IP67 housing & wiring, Audio & amplifier Installation and provision of Push Back Seat and making sure the bus is complete in all aspect and in running condition for height above sea level of more than approx 10000 feet with the required facility and delivered at site Manali as desired by HPSEDC/ HPTDC.		Job
13	Measuring and 3D scanning of bus using industry grade mm accurate 3D scanner for approval.	1	per unit
14	3D creation of bus with the help of scanned data and making proper modifications and doing dimensioning. A proper plan for modification has to be submitted for approval.	1	per unit
15	Making of an electrical layout diagram of the bus for planning of installation of a new equipment.	1	per unit
16	Laying out and Supply of electrical wires inside the bus using IP66 & IP67 wire housing with Heat Resistant & Flame Retardant (HRFR) Cable	180	mete r
17	Supply, testing and commissioning of transparent screens to cover all the sides of the bus 22sqm (i.e., front, sides, corner and top of bus) having : Minimum area of 22 sqm or more with high PPI (Pixel Per inch) having minimum 3840 * 2160 (4K) Resolution with 60 - 65 % transparency with minimum bezel and refresh Rate of 50 hertz 1 HDMI port and supported aspect ratio of 16:9. Power requirement of 240 V AC, 60 - 90 Watt for creating a smooth transition from real world to virtual 3D world.	23.34	sqm

H.P. State Electronics Development Corporation Ltd.

18	Supply, installation, testing and commissioning of Smart Switchable Glass Film screen	23.34	sqm
19	Supply, installation, testing and commissioning of HDMI Cable from reputed suppliers with 24K gold plated connector: It must have streaming support of up to 4k videos with a wrap speed of 10 GB/s or more along with with a inbuilt repeater.		per unit
20	Supply, installation, testing and commissioning of DP to HDMI Converter.	30	per unit
21	Supply, testing and commissioning of 4U Rack mountable Display Server of i9/Xeon Latest Generation with Lifetime OS license, 64 GB RAM of DDR4 3200 Mhz, GPU to drive 4 X 4K output with Ray Tracing Support, should be supplied along with sync card if multiple GPU is used , 1 TB SSD having following interface SATA 6Gb/s should be compatible with SATA 3Gb/s , SATA 1.5Gb/s interfaces having Sequential Read/Write speeds up to 550/520 MB/s respectively, Power: 260 Watt, 240 V AC.	5	per unit
22	Supply, testing and commissioning of Rack mountable Application Server of i9/Xeon Latest Generation with Lifetime OS license, 64 GB RAM of DDR4 3200 Mhz, GPU to drive 2 Output with Ray Tracing Support, 1 TB SSD having following interface SATA 6Gb/s should be compatible with SATA 3Gb/s SATA 1.5Gb/s interfaces having Sequential Read/Write speeds up to 550/520 MB/s respectively, Power: 260 Watt, 240 V AC.	1	per unit
23	Supply, testing and commissioning of Shock Proof Server Rack with Shock Proof of 22U 600X600mm having PDU 6 Socket, 4 Cooling Fan, Static Loading 600 Kgs, 19" International standard, Material SPCC Quality Cold Rolled Sheet, Powder coating Frame RAL 7035 Doors RAL 7016	1	per unit
24	Supply testing and commissioning of industrial grade location sensor for mapping the 3D VR content with the movement calculation of the bus in real time with IP66 & IP67 Housing having max acceleration detection of 300 [m/s2] minimum velocity detection of 5000 meter/minute with maximum power requirement of 24 DC.	1	per unit

H.P. State Electronics Development Corporation Ltd.

25	Supply, testing and commissioning of IMU sensor having 6 Degree of Freedom (DOF), Gyroscope Angular rate range of -245 to 245 deg/s, Accelerometer acceleration rate range of -60 to +60 m/s2, pitch & roll range of -60 to +60 degree for mapping the 3D VR content with gravitational and inertia based displacements of the bus in real time.	1	per unit
26	Supply, testing and commissioning of industrial grade OBD (On-board diagnostics) for data transfer. The OBD(On-board diagnostics) specifications must include wired ability to read data streams and freeze Frame, oil light reset, SAS (Steering Systems and Suspension Systems), SRS (Shock Response Spectrum), DPF(Diesel particulate filters), EPB(Electric Park Brake), TPMS (Tire-pressure monitoring system), battery check function of Industrial Grade make only.	1	per unit
27	Supply, testing and commissioning of Compact Two Way 8"" Loudspeaker System having Frequency Range: 58 Hz - 20 kHz (-10 dB), Frequency Response: 68 Hz - 19 kHz (±3 dB), Coverage Pattern- 90° x 50°, System Sensitivity (dB-SPL, 1W @ 1m)-92 dB, Maximum SPL: 113 dB, Nominal, Impedance: 8 Ohms, Power Handling (Program):500W, Wall Mount Bracket for above speakers.	2	per unit
28	Supply, testing and commissioning of Dual 10"" Compact Subwoofer with Dual 10"" Subwoofer, Frequency Range 40 Hz - 220 Hz, Nominal Impedance 8Ω, Power Rating: 400W cont., Sensitivity (1W, 1m) 95 dB, Max SPL 122 dB, 45 Hz, 24 dB/oct high-pass filter, Safety Agency ROHS-compliant.	2	per unit
29	Supply, testing and commissioning of 6.5"" Premium In-Wall Speakers with: Frequency Range: 38 Hz - 20 kHz (-10 dB), Power Rating: 200 W Peak Sensitivity (1W, 1m): 88 dB SPL, Impedance: 8 ohms, 3rd order (18 dB/oct) Low Pass and 3rd order (18 dB/oct) High Pass, Optimum Air Cavity Behind Speaker 20 to 40 liters with Rough-In Frame for above speakers.	6	per unit

30	Supply, testing and commissioning of Four-channel, 600W @ 4Ω Analog Power Amplifier, $70V/100V$ with 600 W x 4 channels at 4 and 8 ohms/ $100V/70V$ or better, Voltage Gain :34 dB, Frequency Response 20 Hz - 20 kHz (at 1 W), Signal-to-Noise Ratio Analog Input : 104 dB, Damping Factor :> 1000, 3 nos of RJ45 port 1 for data and 2 for Digital audio transmission in redundancy concept, Integrated 8 band EQ , Limiter , Crossover and Delay.	1	per unit
31	Supply, testing and commissioning of Two-channel, 300W @ 4Ω Analog Power Amplifier, 70V/100V, 300 W x 2 channels at 4 and 8 ohms/100V/70V or better, Voltage Gain :34 dB, Frequency Response 20 Hz - 20 kHz (at 1 W), Signal-to-Noise Ratio Analog Input : 104 dB, Damping Factor :> 1000, 3 nos of RJ45 port 1 for data and 2 for Digital audio transmission in redundancy concept, Integrated 8 band EQ , Limiter , Crossover and Delay.	1	per unit
32	Supply, testing and commissioning of 4 x 4 Networked Digital Signal Processor DSP with 4 inputs and 4 outputs, 12 Control Inputs and 6 Logic Outputs for GPIO Integration, 48V phantom power on all analog inputs, THD: <0.01% 20Hz to 20KHz, +10dBu output, Crosstalk: <-75dB, Open architecture software configurable, Separate logic processing power, 2 digital audio bus RJ 45 Port 1 Ethernet port for Monitoring and configuration.	1	per unit
33	Supply,, testing and commissioning of Four Button Zone Selector and Volume Control having 1 Programmable Push/Rotary Encoder, 1 Programmable Encoder Ring (Multicolored), 4 Programmable Buttons (Multicolored), 1 Programmable 64x128 Pixel LCD (Multicolored), Sleep Function, POE port, programmable LCD Screen		per unit
34	Supply, installation, testing and commissioning of wireless keyboard and mouse	2	per unit
35	Supply, installation, testing and commissioning of Router with Dual Channel 2.4 Ghz & 5Ghz having data speed of 2.53 Gbps, with Wireless 802.11a/b/g/n/ac		per unit
36	Supply, installation, testing and commissioning Ethernet switch with 24 Port ,100 Mbps, 240 Volts, 6 Watt Power	1	per unit
37	Supply, installation, testing and commissioning of CAT 6 Cable for connections.	100	mete r

38	CCTV Cameras Supply, testing and commissioning - 2Mp Bullet Camera Indoor/Outdoor, 1/2.8" progressive scan CMOS BLC/3D DNR/HLC - 1920 × 1080@30fps - Up to 40 m IR range - 2.8 mm/4 mm/6mm fixed lens IP67 - DVR along with 5 TV Hard disk For inside bus	1	per unit
39	Supply, installation, testing and commissioning of EVSE (Electric Vehicle Supply Equipment) for charging of 2 Wheeler, 3 Wheeler & 4 Wheeler having charger of following connector type: Combined Charging System (CCS) (min 50 kW) with 1 CG (Connector Gun) CHArge de MOve (CHAdeMO) (min 50 kW) with 1 CG (Connector Gun) Bharat DC-001 (15 kW) with 1 CG (Connector Gun) Bharat AC-001(10 kW) with 3 CG (Connector gun) of 3.3 kW per unit. The charger should be as per DST/BIS standards.		per unit
D	SOFTWARE		
40	Appropriate software to be developed to run the required content and integrate with the supplied sensors. The software source code must be developed using agile / waterfall methodology. Proper supply of test scripts must follow. Software should have following capabilities: Sensor interface for GPS, IMU, Velocimeter, Audio syncing with speed of bus, Content syncing with speed of bus, Geo data Mapping and playing 3D content in multiple screens, rendering capability, Mechanism to trigger software across network with latency of 5-20 ms, Creation of 3D environment with a 3D bus, Data	1	Job
	mapping of sensor to 3D bus, 3D rendering based on sensor input, IMU sensor Data mapping to the movement of 3D bus, Yaw, Pitch, Roll mapping to 3D bus, Integration of virtual camera inside 3D world to generate exact map of real world.		
E	mapping of sensor to 3D bus, 3D rendering based on sensor input, IMU sensor Data mapping to the movement of 3D bus, Yaw, Pitch, Roll mapping to 3D bus, Integration of virtual camera inside 3D world to		
E 41	mapping of sensor to 3D bus, 3D rendering based on sensor input, IMU sensor Data mapping to the movement of 3D bus, Yaw, Pitch, Roll mapping to 3D bus, Integration of virtual camera inside 3D world to generate exact map of real world.	1	year
	mapping of sensor to 3D bus, 3D rendering based on sensor input, IMU sensor Data mapping to the movement of 3D bus, Yaw, Pitch, Roll mapping to 3D bus, Integration of virtual camera inside 3D world to generate exact map of real world. OPERATION AND MAINTENANCE (OPEX)	1	year year
41	mapping of sensor to 3D bus, 3D rendering based on sensor input, IMU sensor Data mapping to the movement of 3D bus, Yaw, Pitch, Roll mapping to 3D bus, Integration of virtual camera inside 3D world to generate exact map of real world. OPERATION AND MAINTENANCE (OPEX) Operation and maintenance cost for 2nd Year		-

Latest instructions for bidders:

- I. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority.
- II. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.
- III. "Bidder from a country which shares a land border with India" for the purpose of this Order means:
 - a. An entity incorporated, established or registered in such a country; or
 - b. A subsidiary of an entity incorporated, established or registered in such a country; or
 - c. An entity substantially controlled through entities incorporated, established or registered in such a country; or
 - d. An entity whose beneficial owner is situated in such a country; or
 - e. An Indian (or other) agent of such an entity; or
 - f. A natural person who is a citizen of such a country; or
 - g. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above
- IV. The beneficial owner for the purpose of (III) above will be as under:
 - In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.

Explanation—

 a. "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent. of shares or capital or profits of the company;

- b. "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;
- 2. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;
- 3. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;
- 4. Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;
- 5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.
- V. An Agent is a person employed to do any act for another, or to represent another in dealings with third person.
- VI. The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority.

The Bidder has to provide following declarations (duly signed and stamped):

Declaration 1 of Latest instructions to bidders

"I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I hereby certify that this bidder is not from such a country and is eligible to be considered."

Declaration 2 of Latest instructions to bidders

"I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India. I certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority. I hereby certify that this bidder fulfills all requirements in this regard and is eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority shall be attached.]

Declaration 3 of Latest instructions to bidders

"I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and on sub-contracting to contractors from such countries; I certify that this bidder is not from such a country or if from such a country, has been registered with the Competent Authority and will not sub-contract any work to a contractor from such countries unless such contractor is registered with the Competent Authority. I hereby certify that this bidder fulfills all requirements in this regard and is eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority shall be attached"

Note: Interested bidder may refer to Office Memorandum (F. No. 6/18/2019-PPD) dated 23.07.2020 of Department of Expenditure, Ministry of Finance, Govt. of India or any other related notification, order, etc. for further details and all the requirement will be in accordance with this memorandum.