

Addendum

Memo No:-39.05.0000.000.14.040.20-398/1

Date:- 09/08/2021

Subject: Addendum to the original standard tender document for “Supply, Installation, Testing & Commissioning of Planetarium With Digital Projection System on Turn key basis for Bangabandhu Sheikh Mujibur Rahman Novotheatre, Rajshahi”.

The following modifications to the original Tender Document have been made.

Clause No	Existing clause	Revised clause
ITT 2.1	The number, identification and name of lots comprising the Tender are: Single Lot	Lot Number : Single Lot Identification: 39.05.0000.000.14.050.21-312, 27June 2021 Name of lots comprising the Tender: Supply, Installation, Testing and Commissioning of Planetariumwith Digital Projection System on Turnkey basis for Bangabandhu Sheikh Mujibur Rahman Novotheatre, Rajshahi Project.
ITT 8.2 ITT 9.1 ITT 39.1 GCC 1.1 (II) GCC 3.1	The fax number mentioned in the Tender Data Sheet having Clause ITT 8.2, ITT 9.1 and ITT 39.1 and GCC 1.1 (II) and GCC 3.1 of Particular Condition of Contract shall be replaced by +880255027742	
Section 6.2 Clause 10.1 Country of Manufacturer	For all the equipment of the planetarium projection system (Except chair and carpet and similar items): USA/UK/EU Countries/ Japan/Korea or Equivalent.	For all the equipment of the planetarium projection system USA/UK/EU Countries/ Japan/Korea or Equivalent.
Section 6.2 Clause 11.2 Dehumidifier	A sufficient quantity of dehumidifiers for the server and control rooms must be provided dynamic updates.	A sufficient quantities of dehumidifier for (i) the areas between the outer and inner domes and (ii) where projectors, sound system, server, control systems for audio, lighting and projection equipment are situated Must be provided.
Section 6.2 Clause 11.3 Technical Diagram	i. Should be included during bidding: ii. Diagram of the entire seating plan including connectivity and conduit diagram for each of the motion platforms and	The following diagrams must be included during bidding: i. Diagram of the entire seating plan including electrical connectivity for the seat lights. ii. Diagram of the speakers

	<p>handle bars</p> <p>iii. Diagram of the external fans, speakers</p> <p>iv. Diagram of the screen location, projector location</p> <p>v. Diagram of all the components i.e rack system for the sound, play out, electrical box, additional racks (if any), compressor, water tanks</p> <p>vi. Any other technical requirements</p> <p>vii. All the diagram should include plan and section/elevation</p> <p>viii. Diagram should be done with respect to the supplied floor plan Schematic of the connectivity and dependent equipment.</p>	<p>iii. Diagram of the projector location</p> <p>iv. Diagram of all the components i.e rack system for the sound, play out, electrical box, additional racks (if any)</p> <p>v. Any other technical requirements</p> <p>vi. All the diagram should include plan and section/elevation</p> <p>vii. Diagram should be done with respect to the supplied floor plan Schematic of the connectivity and dependent equipment.</p>
--	--	---

Note: In case of local Tenderer, the price may be quoted in foreign currency for equipment / goods and local currency for works and services.
For foreign equipment / good CD-VAT will be paid by the Procuring Entity. For local currency part, VAT, IT shall be deducted from bill as per existing government rules.

Apart from the above modifications, the following observation/decision as mentioned in the minutes of pre-tender meeting shall also be considered as the part of this addendum:

Sl	Clause	Existing clause	Revised Clause
1	14.1(b)	The minimum specific experience as a Contractor or Subcontractor in supply of Planetarium with Digital Projection System (Industry Standard 8k Planetarium with minimum 6500x6500 resolution) in at least 02 (two) contracts in public sector successfully completed within the last 5 years. Each Contract value shall be of at least BDT 150 (one hundred fifty) Million or USD 1.75 (one point seven five) Million. Years shall be counted backward from the date of publication of IFT in the newspaper.	The clause shall remain unchanged. Manufacturer's experience can not be delegated for making Tenderer eligible for bidding the Tender.
2	ITT 16.1(a)	A Project Manager, Engineer, and other key staff shall have the following qualifications and experience: Project Manager 1 No. (B.Sc in EEE/CSE) Deputy Project Manager 1 No. (B.Sc in EEE/CSE/Mechanical Engineer) Diploma in Electrical and Electronics Engineering 2 Nos Diploma in Computer Engineering 2 Nos.	The clause is modified as: A Project Manager, Engineer, and other key staff shall have the following qualifications and experience: Project Manager 1 No. (B.Sc in EEE/CSE/ Astronomy) Deputy Project Manager 1 No. (B.Sc in EEE/CSE/ Astronomy) Diploma in Electrical and Electronics Engineering /Astronomy 2 Nos Qualifications for ITT 16.1(a)(4), 16.1(a)(5) and 16.1(a)(6) shall remain unchanged.
3.	ITT 24.2(r)(iv)	The Tenderer or the Original Equipment Manufacturer (OEM) of the Tenderer should have at least 10 years of general experience in supplying Digital Planetarium Equipment around the world;	This clause has been omitted
4.	GCC59.1 and GCC59.2	Regarding the performance security	Yes, "performance security" is in the form of a Bank Guarantee and validation will be 28 days after warranty period. Performance security will be released after the end of 3 years warranty period.

5.	Appendix-1 Terms and Procedures of payment	<p>70% (Seventy percent) of the total or pro rata CIF amount upon Incoterm CIF , upon delivery to carrier within 45 (forty-five) days shall be paid through an irrevocable letter of credit (LC) opened in favor of the supplier in a schedule bank of Bangladesh after receipt of the following documents.</p> <p>25% (twenty five percent) of the total or pro rata CIF amount upon issue of the Operational Acceptance Certificate shall be paid by the bank upon submission of a “Provisional Operational Acceptance Certificate” by the bidder to support his claim. Such a Certificate shall be issued by the Project Director upon completion of installation and relevant contractual liabilities by the bidder.</p>	Terms and Procedure of Payment shall remain unchanged.
		<p>The remaining 5% (five per cent) of the total or pro rata CIF amount upon issue of the Final Operational Acceptance Certificate shall be paid by the bank upon submission of a “Final Operational Acceptance Certificate” by the bidder to support his claim. Such a Certificate shall be issued by the Project Director upon completion of installation and relevant contractual liabilities by the bidder.</p>	Remaining 5% payment will be made upon issuance of “Final Operational Acceptance Certificate” and not after the end of the 3(three) years warranty period.


Section 6.2 Specification 2. Planetarium Software	<p>A full-featured planetarium simulation software suite (Space Engine) that provides accurate, high-fidelity, representations of astronomical objects such as solar system bodies, stars and deep-sky objects, as well as spacecraft and space missions are required. Details are as follows:</p>	<p>A full-featured planetarium simulation software suite that provides accurate, high-fidelity, representations of astronomical objects such as solar system bodies, stars and deep-sky objects, as well as spacecraft and space missions are required. Details are as follows:</p>
2.2(vii)	<p>The system must show the sun in a variety of layers and textures in the Solar Dynamics Observatories (SDO) control panel window. Users can display various textures, images, and videos in several different wavelengths</p>	<p>“The system must show the sun in a variety of layers and textures as in the Solar Dynamics Observatories (SDO). Users can display various textures, images, and videos in several different wavelengths directly to the 3D model of the Sun. System must have</p>

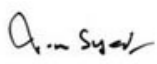
	directly to the 3D model of the Sun. The control panel can be connected to the Internet for real-time, dynamic updates.	the provision to be connected to the Internet for real-time, dynamic updates.”
2.3(ii)	“The ability to pull in tiled, level of detail planetary imagery in standard streaming services, such as WMS (Web Mapping Services), and WTMS (Web Tile Mapping Services)”	“The ability to pull in tiled, level of detail planetary imagery in standard streaming services, such as WMS (Web Mapping Services), OR WTMS (Web Tile Mapping Services)
2.3(iii)	“Support for KLM files (Keyhole Markup Language), including time-varying KLM files.”	The phrase “including time-varying KLM files.” will be omitted and the revised clause will be: “Support for KML files (Keyhole Markup Language)”
2.8(v)	“The system must include the complete American Museum of Natural History Digital Universe Database.”	“The system must include the complete American Museum of Natural History Digital Universe Database OR equivalent scientifically validated Astronomical Database”
2.14 Scientific Content	Planetarium software must have other non-astronomy scientific content playable in the dome as full-dome content: i. Physics: Balance Beam, Elevator Weight, Interactive Pendulum, Magnetic Field Simulator, Michelson-Morely Experiment, and Prism Refraction. ii. Chemistry. Periodic Table of Elements. Must be possible to organize the visualization of the Elements modifying the following parameters: Temperature of State, Melting Point, Boiling Point, Ionization, Electronegativity, Electron Affinity, Valence, Hardness, Modulus, Density etc. The Abundance of the elements in the Universe, Solar system, Meteors, Crust, Oceans, Human Body and change the Temperature Units (Kelvin, Celsius, Fahrenheit). iii. Biology: Blood Type Inheritance, Corrective Lenses, Contrast	Planetarium software must have other non-astronomy scientific content playable in the dome as full-dome content. Few suggested contents of the 6(six) subjects are listed below. Minimum 5 educational contents for each subjects has to be supplied which are suitable for school and college level students. i. Physics: Balance Beam, Elevator Weight, Interactive Pendulum, Magnetic Field Simulator, Michelson-Morely Experiment, and Prism Refraction. ii. Chemistry. Periodic Table of Elements. Must be possible to organize the visualization of the Elements modifying the following parameters: Temperature of State, Melting Point, Boiling Point, Ionization, Electronegativity, Electron Affinity, Valence, Hardness, Modulus, Density etc. The Abundance of the elements in the Universe, Solar system, Meteors, Crust, Oceans, Human Body and change the Temperature Units (Kelvin, Celsius, Fahrenheit).


	<p>Illusion, Phyllotaxis, Human Anatomy (Male and Female), and Jointed Skeleton.</p> <p>iv. Engineering: Artillery, Critical Angle Box, Four-stroke engine, and Lissajous Polishing Robot.</p> <p>v. Art: Color Angles, Color Wheel, Rotation Patterns, etc.</p> <p>vi. Mathematics: 2D Vector Addition, Connect Four game, interactive unit circle, basic multiplication, and sine-cosine wave.</p>	<p>Fahrenheit).</p> <p>iii. Biology: Blood Type Inheritance, Corrective Lenses, Contrast Illusion, Phyllotaxis, Human Anatomy (Male and Female), and Jointed Skeleton.</p> <p>iv. Engineering: Artillery, Critical Angle Box, Four-stroke engine, and Lissajous Polishing Robot.</p> <p>v. Art: Color Angles, Color Wheel, Rotation Patterns, etc.</p> <p>vi. Mathematics: 2D Vector Addition, Connect Four game, interactive unit circle, basic multiplication, and sine-cosine wave.</p>
2.15(i)	“Support for JavaScript ECMA scripting language”.	“Support for JavaScript ECMA scripting language” will be omitted
2.15(ii)	Support for full Python and Javascript integration for advanced real-time capabilities.	Support for full Python OR JavaScript integration for advanced real-time capabilities.
3.8	“Clicking on virtually any text field in the User Interface will enable that text to be spoken in the currently selected voice. English and several other languages should be supported.”	“Clicking on virtually any text field in the User Interface will enable that text to be spoken in the currently selected voice. English and several other languages should be supported.” Will be omitted
6.2(xiii)	“Operating system: Microsoft Windows 10 or newer”	“Operating system: Licensed Microsoft Windows 10 or newer or latest Linux OS with Graphical User Interface (GUI)”
6.2(xvi):	“The Synchronization of channels with appropriate hardware and not just genlock only.”	“The Synchronization of channels with appropriate technology”

The addendum as a Whole shall be deemed as the integral part of the tender document.


(Md. Mahfuzar Rahman)
Sr. Electrical Engineer
&
Procurement Consultant
Establishment of Bangabandhu Sheikh
Mujibur Rahman Novotheatre,
Rajshahi Project
Acme Traders
2nd Floor, Ahsan Plaza
56, New Eskaton Road, Dhaka-1000


Rammya Rahim
Choudhury (Rommo)
Consultant (Deputy Team Leader)
Establishment of Bangabandhu Sheikh
Mujibur Rahman Novotheatre,
Rajshahi Project
Acme Traders
2nd Floor, Ahsan Plaza
56, New Eskaton Road, Dhaka-1000


Ishtiaque M. Syed
Consultant (Team Leader)
Establishment of Bangabandhu Sheikh
Mujibur Rahman Novotheatre,
Rajshahi Project
Acme Traders
2nd Floor, Ahsan Plaza
56, New Eskaton Road, Dhaka-1000


Md. Azam-E-Sadat
Project Director
Establishment of Bangabandhu Sheikh
Mujibur Rahman Novotheatre
Rajshahi Project.
Bangabandhu Sheikh Mujibur
Rahman Novotheatre
Bijoy Sarani, Dhaka-1213.