

REFERENCE OF TENDER	DESCRIPTION OF TENDER	TIME PERIOD OF TENDER	DEPARTMENT/DIVISION/ UNIT REQUESTING TENDER	FEES	CLOSING DATE NOT LATER THAN 2.00PM	FOCAL PERSON
KK/42/2023/HTD	SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING ONE (1) UNIT OF DENTAL CHAIR COMPLETE SYSTEM FOR ISTANA NURUL IZZAH	-	DEPARTMENT OF HEALTHCARE TECHNOLOGY	\$10.00	7 TH MARCH 2023	<p>Nuramaliah binti Hj Jamaludin Biomedical Engineer(for Department of Dental Services) Department Of Healthcare Technology Ministry Of Health Negara Brunei Darussalam Contact No. 2380426 EXT 385 e-mail: nuramaliah.jamaludin@moh.gov.bn</p>

NOMBOR TAWARAN : KK/42/2023/HTD

**KEMENTERIAN KESIHATAN
NEGARA BRUNEI DARUSSALAM**

**SUPPLY, DELIVERY, INSTALLATION, TESTING AND
COMMISSIONING ONE (1) UNIT OF DENTAL CHAIR
COMPLETE SYSTEM FOR ISTANA NURUL IZZAH**

YURAN TAWARAN : \$10.00

NOMBOR RESIT :

TARIKH TUTUP : HARI SELASA, 7HB MAC 2023

JAM : 2.00 PETANG

KEPADA :

**PENGERUSI LEMBAGA TAWARAN KECIL
PETI TAWARAN, TINGKAT BAWAH
BANGUNAN KEMENTERIAN KESIHATAN
COMMONWEALTH DRIVE
BANDAR SERI BEGAWAN BB 3910
NEGARA BRUNEI DARUSSALAM**

(CLUSTERING)

SECTION 2

SPECIFICATIONS AND REQUIREMENTS

TENDER REFERENCE NO: KK/42/2023/HTD

**INVITATION TO TENDER
SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING ONE (1) UNIT OF
DENTAL CHAIR COMPLETE SYSTEM FOR ISTANA NURUL IZZAH**

USER REQUIREMENTS	
	(A) Dental Chair:
Standard features	Ergonomic workflow
	Smooth and uniform surface of the dental unit to ensure impeccable external infection control
	Easy Clean Seamless type upholstery
	Left and right armrest
	Motorised headrest
	Foldable leg rest – ease for patients to enter and exit the chair
	Manual and Auto mode control for seat lifting, seat lowering, backrest reclining, backrest raising, preset Position, auto return, last position and emergency stop.
	Seat tilting mechanism synchronized with backrest angle
	Foot switch control that operates the instruments, the unit and the chair.
	(B) Dental unit:
Delivery types:	Over patient type, Chair mounted instrument table vertically and horizontally adjustable.
Dental installation	Floor mounted ; to be fixed to the floor
Standard features	With fiber optic tubing
	Handpiece and instrument holder for Doctor side and Assistant side
	Instrument tray table – with feature of ease to clean
	Integrated water treatment system for water purification to ensure safe dental treatment environment
	Integrated cuspidor

USER REQUIREMENTS	
	Detachable bowl for ease of cleaning
	Detachable High volume evacuation and saliva ejector with autoclavable tips
	Built in service centre
	On-off switch for dental unit
	Automatic Timed Cup filler and bowl flusher
	Foot controller with drive valve, water on/off valve and chip on/off valve
	Safety switch
	Built-in junction box in chair base
	Unit ON/OFF switch
Dental operating light with integrated camera:	Operating light with integrated cameras
	LED technology and mirror optics to guarantee uniform light intensity and minimised shadows.
	Light can be operated from the light itself, dental unit's control panel or foot control
	"No touch" function. Can be operated by waving the hand in front of the sensor
	The camera is capable to stream the entire treatment session or record individual moments during treatment.
	The camera can be operated the via dental unit's user interface
	Integrated into the dental unit
Infection control features:	Integrated cleaning holders
	Periodical waterline cleaning
	Continuous water disinfection
	An automated suction tube cleaning system
	Integrated Container for disinfectants
Monitor	Full HD display monitor
	Integrated into the dental unit

USER REQUIREMENTS	
	(C) Dental instrumentation:
Dental instrumentation (To be supplied with each unit of dental chair)	2x High speed air turbine with light (Adult)
	2x High speed mini head air turbine with light (children)
	1x Air motor with fibre-optic light (slow speed)
	1x Electric Micromotor complete with module & fibre-optic tubing (slow speed) (Tenderer to specify the brand/model)
	2x Slow speed Straight Handpiece with fibre-optic light
	2x Slow speed contra angle Handpiece with fibre-optic light (Adult)
	2x Slow speed contra angle mini head Handpiece with fibre-optic light (Child)
	2x Coupling with fibre-optic light
	1x built in Electric Ultrasonic Scaler with 8 scaler tips (Tenderer to specify the brand/model)
	1x 3-way syringe with Riskontrol adaptor
	1x high volume evacuator with metal autoclaveable tip
	1x saliva ejector with metal autoclaveable tip
	1x assembly of Light Cure (Polymerisation unit) probe (Tenderer to specify the brand/model)
Standard features:	Capable to produce detailed diagnostic imaging
	High frequency x-ray generator to minimize patient exposure to radiation
Xray tube Anode:	Type: Tenderer to specify Focal spot size: 0.4 mm Minimum total filtration: Not more than 2.5 mm Al equivalent Heat capacity: Tenderer to specify
X-Ray generator:	Type: Tenderer to specify Tube Voltage: <ul style="list-style-type: none"> - Min Voltage: not more than 60 kVp - Max Voltage: not less than 70 kVp - Selectable: Tenderer to specify Tube Current: <ul style="list-style-type: none"> - Max Current: not less than 8 mA - Selectable: Tenderer to specify Exposure time: Not more than 3.2 sec

USER REQUIREMENTS	
Configuration:	Intraoral x-ray unit is mounted on the dental chair
	(E) Integrated Intraoral Scanner Unit
Standard features	Indications: Inlays/Onlays, Veneers, Crowns, Bridges, Full arches, Scan bodies, Models, Impressions
	Anti-fogging technology
	Autoclavable Scanning Tips
Data output	open STL and PLY files.
Scanning options	True color
Configuration	Integrated into Dental Chair Unit. - Image can be viewed on Monitor of Dental Chair Unit.
	(F) PC System Requirement
Model/Type	Enterprise grade
Processor	7 th Generation Intel Core i5 Processor or higher
RAM	8GB DDR4
Storage	500GB, SATA2 or 3, 7200 rpm
Video Graphics	Intel HD Integrated
Connectivity	<ul style="list-style-type: none"> - Bluetooth 4.0 or higher - Ethernet - Wireless-N
Ports	<ul style="list-style-type: none"> - USB 3.0 - Universal audio jack - security lock slot - external antenna connector (Optional) - DisplayPort - HDMI - VGA - RJ-45 - 1 power connector
Weight	Not exceeding 4 kg
Operating system	Microsoft Windows 10 pro 64 bit
Security Features	Trusted Platform Module Allows remote support
Monitor	Tenderer to specify

USER REQUIREMENTS	
	The Equipment Should Come With All Necessary Accessories For It To Be Fully Operational
	(G) Air compressor
Standard features:	Oil free, dry and hygienic air compressor for single dental chair
	With membrane-drying unit; To prevent formation of moisture as to protect instruments and ensures the hygiene.
Output:	Output at 5 bar must not less than 70 L/min
Tank capacity:	Not be less than 20 L
Pressure range:	<ul style="list-style-type: none"> - Min: Not more than 6 bar - Max: Not less than 7 bar
Noise level	not more than 54dB(A) at 5 Bar in the cabinet
	(H) Suction Pump
Standard features:	Suction unit for single dental chair
	Vacuum generating suction unit with integrated separation.
	Function is to produce a vacuum in order to suck up saliva, rinsing water and other fluids which occur during dental treatment and which are transported to the waste water system
	Corrosion protection on housing parts and runners
	Internal Cooling
	Integrated humidity protection
Vacuum:	At least 180 mbar
Max. fluid flow rate:	Not less than 4 litres/min
Voltage:	Voltage: 230V, 50-60Hz
Accessories:	Complete with exhaust air bacterial filter and installation kit
	Comes with basic set for disinfecting and cleaning of suction system (Tenderer to specify the brand/model)
	(I) Dental stools: (To be supplied with each unit of dental chair)
Doctor stool	Height adjusted by hand lever

USER REQUIREMENTS	
	forward tilt mechanism on back support
	Gas pump lifting and lowering mechanism
	5-legged base casters
	colour to match the dental chair of user choice
Assistant stool	Height adjusted by ring lever
	Gas pump lifting and lowering mechanism
	5-legged base casters
	colour to match the dental chair of user choice
	Equipment Installation and commissioning, on-site demonstration, operation training and technical training and surgery renovation to allow final installation
	If required, the renovation work should include:
	<ul style="list-style-type: none"> • Necessary floor/wall hacking and finishing with hospital grade vinyl covering
	<ul style="list-style-type: none"> • Supply and fitting new/additional power supply
	<ul style="list-style-type: none"> • Plumbing and water supply
	Supplier must provide both operation and service manuals

SECTION II - PROCUREMENT REQUIREMENT

BRAND AND MODEL OF EQUIPMENT:

COUNTRY OF ORIGIN:

PRICE (CIF) B\$

WHERE MARKETED:

YEAR MANUFACTURED:

WARRANTY:

DELIVERY TIME:

PRICE VALIDITY:

SECTION III - TECHNICAL REQUIREMENTS
MAINS POWER SUPPLY:
EQUIPMENT AMBIENT OPERATING TEMPERATURE RANGE:
BATTERY BACKUP:
INTERNATIONAL SAFETY STANDARD:
TECHNICAL SUPPORT:
DIMENSIONS(mm):
WEIGHT(in Kg):
EQUIPMENT WHOLE LIFE TIME SUPPORT:

BROUCHER:	Detailed broucher submitted?
USER MANUALS:	Tenderers must supply during commissioning, three sets of user manuals, one set must be in the form of soft copy. (PDF Format)
SERVICE MANUALS:	Tenderers must supply during commissioning, three sets of service manuals, one set must be in the form of soft copy. (PDF Format).
SITE REQUIREMENT:	Floor Hacking, piping, Electrical Connections, etc.
SPARE-PARTS AND CONSUMABLES LISTINGS:	<p>Tenderers must supply during commissioning, a comprehensive list of equipment spare-parts and consumables in the form of soft copy (e.g: Microsoft EXCEL).</p> <p>The listing must have the following details;</p> <ul style="list-style-type: none"> • Part Number • Part Description
WARRANTY PLANNED PREVENTIVE MAINTENANCE:	Tenderers must carry-out a minimum of two times PPM per year during the equipment warranty, starting six months after the date of commissioning.
TECHNICAL TRAINING:	Tenderers are required to conduct user training to the user(s)
ON-SITE:	<p>Tenderers to conduct training to Biomedical Engineers and Technicians.</p> <p>Training to be conducted locally, tenderers are required to:</p> <ul style="list-style-type: none"> ○ Provide training materials, test equipment, demo equipments, etc. ○ Provide training to two groups of technical staffs. ○ Provide 2 days (minimum) of training for each group. ○ Training to be conducted at Dental chair installed location
AT MANUFACTURER'S PREMISES:	<p>Training to be conducted at the manufacturer's training premises / facilities. Tenderers are required to;</p> <ul style="list-style-type: none"> ○ Provide air tickets, accommodation, transportation, etc. for 2 persons. ○ Provide training for 2 persons. ○ Minimum no of days for training – 3 days.

**UNIT TAWARAN
KEMENTERIAN KESIHATAN
NEGARA BRUNEI DARUSSALAM**

**SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING ONE (1) UNIT OF DENTAL CHAIR COMPLETE SYSTEM
FOR ISTANA NURUL IZZAH**

USER REQUIREMENTS		YES	NO	(IF 'YES') Please State Catalogue/ brochure reference number
(A) Dental Chair:				
Standard features	Ergonomic workflow			
	Smooth and uniform surface of the dental unit to ensure impeccable external infection control			
	Easy Clean Seamless type upholstery			
	Left and right armrest			
	Motorised headrest			
	Foldable leg rest – ease for patients to enter and exit the chair			
	Manual and Auto mode control for seat lifting, seat lowering, backrest reclining, backrest raising, preset Position, auto return, last position and emergency stop.			
	Seat tilting mechanism synchronized with backrest angle			
	Foot switch control that operates the instruments, the unit and the chair.			
(B) Dental unit:				
Delivery types:	Over patient type, Chair mounted instrument table vertically and horizontally adjustable.			
Dental unit installation	Floor mounted ; to be fixed to the floor			
Standard features	With fiber optic tubing			
	Handpiece and instrument holder for Doctor side and Assistant side			
	Instrument tray table – with feature of ease to clean			
	Integrated water treatment system for water purification to ensure safe dental treatment environment			

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**SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING ONE (1) UNIT OF DENTAL CHAIR COMPLETE SYSTEM
FOR ISTANA NURUL IZZAH**

	Integrated cuspidor			
	Detachable bowl for ease of cleaning			
	Detachable High volume evacuation and saliva ejector with autoclavable tips			
	Built in service centre			
	On-off switch for dental unit			
	Automatic Timed Cup filler and bowl flusher			
	Foot controller with drive valve, water on/off valve and chip on/off valve			
	Safety switch			
	Built-in junction box in chair base			
	Unit ON/OFF switch			
Dental operating light with integrated camera:	Operating light with integrated cameras			
	LED technology and mirror optics to guarantee uniform light intensity and minimised shadows.			
	Light can be operated from the light itself, dental unit’s control panel or foot control			
	“No touch” function. Can be operated by waving the hand in front of the sensor			
	The camera is capable to stream the entire treatment session or record individual moments during treatment.			
	The camera can be operated the via dental unit’s user interface			
Infection control features:	Integrated into the dental unit			
	Integrated cleaning holders			
	Periodical waterline cleaning			
	Continuous water disinfection			
	An automated suction tube cleaning system			
Integrated Container for disinfectants				

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FOR ISTANA NURUL IZZAH**

Monitor	Full HD display monitor			
	Integrated into the dental unit			
(C) Dental instrumentation:				
Dental instrumentation (To be supplied with each unit of dental chair)	2x High speed air turbine with light (Adult)			
	2x High speed mini head air turbine with light (children)			
	1x Air motor with fibre-optic light (slow speed)			
	1x Electric Micromotor complete with module & fibre-optic tubing (slow speed) (Tenderer to specify the brand/model)			
	2x Slow speed Straight Handpiece with fibre-optic light			
	2x Slow speed contra angle Handpiece with fibre-optic light (Adult)			
	2x Slow speed contra angle mini head Handpiece with fibre-optic light (Child)			
	2x Coupling with fibre-optic light			
	1x built in Electric Ultrasonic Scaler with 8 scaler tips (Tenderer to specify the brand/model)			
	1x 3-way syringe with Riskontrol adaptor			
	1x high volume evacuator with metal autoclaveable tip			
	1x saliva ejector with metal autoclaveable tip			
	1x assembly of Light Cure (Polymerisation unit) probe (Tenderer to specify the brand/model)			
(D) Integrated Intraoral X-ray Unit				
Standard features:	Capable to produce detailed diagnostic imaging			
	High frequency x-ray generator to minimize patient exposure to radiation			

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**SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING ONE (1) UNIT OF DENTAL CHAIR COMPLETE SYSTEM
FOR ISTANA NURUL IZZAH**

Xray tube Anode:	Type: Tenderer to specify Focal spot size: 0.4 mm Minimum total filtration: Not more than 2.5 mm Al equivalent Heat capacity: Tenderer to specify			
X-Ray generator:	Type: Tenderer to specify Tube Voltage: <ul style="list-style-type: none"> - Min Voltage: not more than 60 kVp - Max Voltage: not less than 70 kVp - Selectable: Tenderer to specify Tube Current: <ul style="list-style-type: none"> - Max Current : not less than 8 mA - Selectable: Tenderer to specify Exposure time: Not more than 3.2 sec			
Configuration:	Intraoral x-ray unit is mounted on the dental chair			
(E) Integrated Intraoral Scanner Unit				
Standard features	Indications: Inlays/Onlays, Veneers, Crowns, Bridges, Full arches, Scan bodies, Models, Impressions			
	Anti fogging technology			
	Autoclavable Scanning Tips			
Data output	open STL and PLY files.			
Scanning options	True color			
Configuration	Integrated into Dental Chair Unit. - Image can be viewed on Monitor of Dental Chair Unit.			

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**SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING ONE (1) UNIT OF DENTAL CHAIR COMPLETE SYSTEM
FOR ISTANA NURUL IZZAH**

(F) PC System Requirement

Model/Type	Enterprise grade			
Processor	7 th Generation Intel Core i5 Processor or higher			
RAM	8GB DDR4			
Storage	500GB, SATA2 or 3, 7200 rpm			
Video Graphics	Intel HD Integrated			
Connectivity	<ul style="list-style-type: none"> - Bluetooth 4.0 or higher - Ethernet - Wireless-N 			
Ports	<ul style="list-style-type: none"> - USB 3.0 - Universal audio jack - security lock slot - external antenna connector (Optional) - DisplayPort - HDMI - VGA - RJ-45 - 1 power connector 			
Weight	Not exceeding 4 kg			
Operating system	Microsoft Windows 10 pro 64 bit			
Security Features	Trusted Platform Module Allows remote support			

**UNIT TAWARAN
KEMENTERIAN KESIHATAN
NEGARA BRUNEI DARUSSALAM**

**SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING ONE (1) UNIT OF DENTAL CHAIR COMPLETE SYSTEM
FOR ISTANA NURUL IZZAH**

Monitor	Tenderer to specify			
	The Equipment Should Come With All Necessary Accessories For It To Be Fully Operational			
(G) Air compressor				
Standard features:	Oil free, dry and hygienic air compressor for single dental chair			
	With membrane-drying unit; To prevent formation of moisture as to protect instruments and ensures the hygiene.			
Output:	Output at 5 bar must not less than 70 L/min			
Tank capacity:	Not be less than 20 L			
Pressure range:	- Min: Not more than 6 bar - Max: Not less than 7 bar			
Noise level	not more than 54dB(A) at 5 Bar in the cabinet			
(H) Suction Pump				
Standard features:	Suction unit for single dental chair			
	Vacuum generating suction unit with integrated separation.			
	Function is to produce a vacuum in order to suck up saliva, rinsing water and other fluids which occur during dental treatment and which are transported to the waste water system			
	Corrosion protection on housing parts and runners			
	Internal Cooling			

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**SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING ONE (1) UNIT OF DENTAL CHAIR COMPLETE SYSTEM
FOR ISTANA NURUL IZZAH**

	Integrated humidity protection			
Vacuum:	At least 180 mbar			
Max. fluid flow rate:	Not less than 4 litres/min			
Voltage:	Voltage: 230V, 50-60Hz			
Accessories:	Complete with exhaust air bacterial filter and installation kit			
	Comes with basic set for disinfecting and cleaning of suction system (Tenderer to specify the brand/model)			
(I) Dental stools: (To be supplied with each unit of dental chair)				
Doctor stool	Height adjusted by hand lever			
	forward tilt mechanism on back support			
	Gas pump lifting and lowering mechanism			
	5-legged base casters			
	colour to match the dental chair of user choice			
Assistant stool	Height adjusted by ring lever			
	Gas pump lifting and lowering mechanism			
	5-legged base casters			
	colour to match the dental chair of user choice			
(J) Work include				
	Equipment Installation and commissioning, on-site demonstration, operation training and technical training and surgery renovation to allow final installation			

**UNIT TAWARAN
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**SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING ONE (1) UNIT OF DENTAL CHAIR COMPLETE SYSTEM
FOR ISTANA NURUL IZZAH**

	If required, the renovation work should include:			
	<ul style="list-style-type: none"> Necessary floor/wall hacking and finishing with hospital grade vinyl covering 			
	<ul style="list-style-type: none"> Supply and fitting new/additional power supply 			
	<ul style="list-style-type: none"> Plumbing and water supply 			
	Supplier must provide both operation and service manuals			

	SECTION II - PROCUREMENT REQUIREMENT	
BRAND AND MODEL OF EQUIPMENT:		
COUNTRY OF ORIGIN:		
PRICE (CIF) B\$	UNIT PRICE (B\$ CIF):	TOTAL PRICE (B\$ CIF):
WHERE MARKETED:		
YEAR MANUFACTURED:		

**UNIT TAWARAN
KEMENTERIAN KESIHATAN
NEGARA BRUNEI DARUSSALAM**

**SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING ONE (1) UNIT OF DENTAL CHAIR COMPLETE SYSTEM
FOR ISTANA NURUL IZZAH**

WARRANTY:	
DELIVERY TIME:	
PRICE VALIDITY:	
	SECTION III - TECHNICAL REQUIREMENTS
MAINS POWER SUPPLY:	
EQUIPMENT AMBIENT OPERATING TEMPERATURE RANGE:	
BATTERY BACKUP:	
INTERNATIONAL SAFETY STANDARD:	
TECHNICAL SUPPORT:	

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**SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING ONE (1) UNIT OF DENTAL CHAIR COMPLETE SYSTEM
FOR ISTANA NURUL IZZAH**

DIMENSIONS(mm):			
WEIGHT(in Kg):			
EQUIPMENT WHOLE LIFE TIME SUPPORT:	Number of years, spare parts are available after the installation of the equipment: _____ years.		
		YES	NO
BROUCHER:	Detailed broucher submitted?		
USER MANUALS:	Tenderers must supply during commissioning, three sets of user manuals, one set must be in the form of soft copy. (PDF Format)		
SERVICE MANUALS:	Tenderers must supply during commissioning, three sets of service manuals, one set must be in the form of soft copy. (PDF Format).		
SITE REQUIREMENT:	Floor Hacking, piping, Electrical Connections, etc.		
SPARE-PARTS AND CONSUMABLES LISTINGS:	Tenderers must supply during commissioning, a comprehensive list of equipment spare-parts and consumables in the form of soft copy (e.g: Microsoft EXCEL).		

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FOR ISTANA NURUL IZZAH**

	<p>The listing must have the following details;</p> <ul style="list-style-type: none"> • Part Number • Part Description 		
WARRANTY PLANNED PREVENTIVE MAINTENANCE:	<p>Tenderers must carry-out a minimum of two times PPM per year during the equipment warranty, starting six months after the date of commissioning.</p>		
TECHNICAL TRAINING:	<p>Tenderers are required to conduct user training to the user(s)</p>		
ON-SITE:	<p>Tenderers to conduct training to Biomedical Engineers and Technicians.</p> <p>Training to be conducted locally, tenderers are required to :</p> <ul style="list-style-type: none"> ○ Provide training materials, test equipment, demo equipments, etc. ○ Provide training to two groups of technical staffs. ○ Provide 2 days (minimum) of training for each group. ○ Training to be conducted at Dental chair installed location 		
AT MANUFACTURER'S PREMISES:	<p>Training to be conducted at the manufacturer's training premises / facilities. Tenderers are required to;</p> <ul style="list-style-type: none"> ○ Provide air tickets, accommodation, transportation, etc. for 2 persons. ○ Provide training for 2 persons. ○ Minimum no of days for training – 3 days. 		

SECTION 3

TENDER FORM

To:

TENDER REFERENCE NO: KK/42/2023/HTD

INVITATION TO TENDER

SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING ONE (1) UNIT OF DENTAL CHAIR COMPLETE SYSTEM
FOR ISTANA NURUL IZZAH

USER REQUIREMENTS		YES	NO	(IF 'YES') Please State Catalogue/ brochure reference number
(A) Dental Chair:				
Standard features	Ergonomic workflow			
	Smooth and uniform surface of the dental unit to ensure impeccable external infection control			
	Easy Clean Seamless type upholstery			
	Left and right armrest			
	Motorised headrest			
	Foldable leg rest – ease for patients to enter and exit the chair			
	Manual and Auto mode control for seat lifting, seat lowering, backrest reclining, backrest raising, preset Position, auto return, last position and emergency stop.			
	Seat tilting mechanism synchronized with backrest angle			
	Foot switch control that operates the instruments, the unit and the chair.			

USER REQUIREMENTS		YES	NO	(IF 'YES') Please State Catalogue/ brochure reference number
(B) Dental unit:				
Delivery types:	Over patient type, Chair mounted instrument table vertically and horizontally adjustable.			
Dental unit installation	Floor mounted ; to be fixed to the floor			
Standard features	With fiber optic tubing			
	Handpiece and instrument holder for Doctor side and Assistant side			
	Instrument tray table – with feature of ease to clean			
	Integrated water treatment system for water purification to ensure safe dental treatment environment			
	Integrated cuspidor			
	Detachable bowl for ease of cleaning			
	Detachable High volume evacuation and saliva ejector with autoclavable tips			
	Built in service centre			
	On-off switch for dental unit			
	Automatic Timed Cup filler and bowl flusher			
	Foot controller with drive valve, water on/off valve and chip on/off valve			
	Safety switch			
	Built-in junction box in chair base			
	Unit ON/OFF switch			

USER REQUIREMENTS		YES	NO	(IF 'YES') Please State Catalogue/ brochure reference number
Dental operating light with integrated camera:	Operating light with integrated cameras			
	LED technology and mirror optics to guarantee uniform light intensity and minimised shadows.			
	Light can be operated from the light itself, dental unit's control panel or foot control			
	"No touch" function. Can be operated by waving the hand in front of the sensor			
	The camera is capable to stream the entire treatment session or record individual moments during treatment.			
	The camera can be operated the via dental unit's user interface			
	Integrated into the dental unit			
Infection features: control	Integrated cleaning holders			
	Periodical waterline cleaning			
	Continuous water disinfection			
	An automated suction tube cleaning system			
	Integrated Container for disinfectants			
Monitor	Full HD display monitor			
	Integrated into the dental unit			
(C) Dental instrumentation:				
Dental instrumentation (To be supplied with each	2x High speed air turbine with light (Adult)			
	2x High speed mini head air turbine with light (children)			

USER REQUIREMENTS		YES	NO	(IF 'YES') Please State Catalogue/ brochure reference number
unit of dental chair)	1x Air motor with fibre-optic light (slow speed)			
	1x Electric Micromotor complete with module & fibre-optic tubing (slow speed) (Tenderer to specify the brand/model)			
	2x Slow speed Straight Handpiece with fibre-optic light			
	2x Slow speed contra angle Handpiece with fibre-optic light (Adult)			
	2x Slow speed contra angle mini head Handpiece with fibre-optic light (Child)			
	2x Coupling with fibre-optic light			
	1x built in Electric Ultrasonic Scaler with 8 scaler tips (Tenderer to specify the brand/model)			
	1x 3-way syringe with Riskontrol adaptor			
	1x high volume evacuator with metal autoclaveable tip			
	1x saliva ejector with metal autoclaveable tip			
	1x assembly of Light Cure (Polymerisation unit) probe (Tenderer to specify the brand/model)			
	(D) Integrated Intraoral X-ray Unit			
Standard features:	Capable to produce detailed diagnostic imaging			
	High frequency x-ray generator to minimize patient exposure to radiation			
Xray tube Anode:	Type: Tenderer to specify Focal spot size: 0.4 mm Minimum total filtration: Not more than 2.5 mm Al equivalent Heat capacity: Tenderer to specify			
X-Ray generator:	Type: Tenderer to specify			

USER REQUIREMENTS		YES	NO	(IF 'YES') Please State Catalogue/ brochure reference number
	Tube Voltage: <ul style="list-style-type: none"> - Min Voltage: not more than 60 kVp - Max Voltage: not less than 70 kVp - Selectable: Tenderer to specify Tube Current: <ul style="list-style-type: none"> - Max Current : not less than 8 mA - Selectable: Tenderer to specify Exposure time: Not more than 3.2 sec			
Configuration:	Intraoral x-ray unit is mounted on the dental chair			
(E) Integrated Intraoral Scanner Unit				
Standard features	Indications: Inlays/Onlays, Veneers, Crowns, Bridges, Full arches, Scan bodies, Models, Impressions			
	Anti fogging technology			
	Autoclavable Scanning Tips			
Data output	open STL and PLY files.			
Scanning options	True color			
Configuration	Integrated into Dental Chair Unit. - Image can be viewed on Monitor of Dental Chair Unit.			
(F) PC System Requirement				
Model/Type	Enterprise grade			
Processor	7 th Generation Intel Core i5 Processor or higher			
RAM	8GB DDR4			

USER REQUIREMENTS		YES	NO	(IF 'YES') Please State Catalogue/ brochure reference number
Storage	500GB, SATA2 or 3, 7200 rpm			
Video Graphics	Intel HD Integrated			
Connectivity	<ul style="list-style-type: none"> - Bluetooth 4.0 or higher - Ethernet - Wireless-N 			
Ports	<ul style="list-style-type: none"> - USB 3.0 - Universal audio jack - security lock slot - external antenna connector (Optional) - DisplayPort - HDMI - VGA - RJ-45 - 1 power connector 			
Weight	Not exceeding 4 kg			
Operating system	Microsoft Windows 10 pro 64 bit			
Security Features	Trusted Platform Module Allows remote support			
Monitor	Tenderer to specify			
	The Equipment Should Come With All Necessary Accessories For It To Be Fully Operational			
(G) Air compressor				
Standard features:	Oil free, dry and hygienic air compressor for single dental chair			
	With membrane-drying unit; To prevent formation of moisture as to protect instruments and ensures the hygiene.			
Output:	Output at 5 bar must not less than 70 L/min			

USER REQUIREMENTS		YES	NO	(IF 'YES') Please State Catalogue/ brochure reference number
Tank capacity:	Not be less than 20 L			
Pressure range:	- Min: Not more than 6 bar - Max: Not less than 7 bar			
Noise level	not more than 54dB(A) at 5 Bar in the cabinet			
(H) Suction Pump				
Standard features:	Suction unit for single dental chair			
	Vacuum generating suction unit with integrated separation.			
	Function is to produce a vacuum in order to suck up saliva, rinsing water and other fluids which occur during dental treatment and which are transported to the waste water system			
	Corrosion protection on housing parts and runners			
	Internal Cooling			
	Integrated humidity protection			
Vacuum:	At least 180 mbar			
Max. fluid flow rate:	Not less than 4 litres/min			
Voltage:	Voltage: 230V, 50-60Hz			
Accessories:	Complete with exhaust air bacterial filter and installation kit			
	Comes with basic set for disinfecting and cleaning of suction system (Tenderer to specify the brand/model)			
(I) Dental stools: (To be supplied with each unit of dental chair)				

USER REQUIREMENTS		YES	NO	(IF 'YES') Please State Catalogue/ brochure reference number
Doctor stool	Height adjusted by hand lever			
	forward tilt mechanism on back support			
	Gas pump lifting and lowering mechanism			
	5-legged base casters			
	colour to match the dental chair of user choice			
Assistant stool	Height adjusted by ring lever			
	Gas pump lifting and lowering mechanism			
	5-legged base casters			
	colour to match the dental chair of user choice			
(J) Work include				
	Equipment Installation and commissioning, on-site demonstration, operation training and technical training and surgery renovation to allow final installation			
	If required, the renovation work should include:			
	<ul style="list-style-type: none"> Necessary floor/wall hacking and finishing with hospital grade vinyl covering 			
	<ul style="list-style-type: none"> Supply and fitting new/additional power supply 			
	<ul style="list-style-type: none"> Plumbing and water supply 			
	Supplier must provide both operation and service manuals			

	SECTION II - PROCUREMENT REQUIREMENT	
BRAND AND MODEL OF EQUIPMENT:		
COUNTRY OF ORIGIN:		
PRICE (CIF) B\$	UNIT PRICE (B\$ CIF):	TOTAL PRICE (B\$ CIF):
WHERE MARKETED:		
YEAR MANUFACTURED:		
WARRANTY:		
DELIVERY TIME:		
PRICE VALIDITY:		
	SECTION III - TECHNICAL REQUIREMENTS	
MAINS POWER SUPPLY:		
EQUIPMENT AMBIENT OPERATING TEMPERATURE RANGE:		
BATTERY BACKUP:		
INTERNATIONAL SAFETY STANDARD:		
TECHNICAL SUPPORT:		
DIMENSIONS(mm):		
WEIGHT(in Kg):		
EQUIPMENT WHOLE LIFE TIME SUPPORT:	Number of years, spare parts are available after the installation of the equipment: _____ years.	

		YES	NO
BROUCHER:	Detailed broucher submitted?		
USER MANUALS:	Tenderers must supply during commissioning, three sets of user manuals, one set must be in the form of soft copy. (PDF Format)		
SERVICE MANUALS:	Tenderers must supply during commissioning, three sets of service manuals, one set must be in the form of soft copy. (PDF Format).		
SITE REQUIREMENT:	Floor Hacking, piping, Electrical Connections, etc.		
SPARE-PARTS AND CONSUMABLES LISTINGS:	Tenderers must supply during commissioning, a comprehensive list of equipment spare-parts and consumables in the form of soft copy (e.g: Microsoft EXCEL). The listing must have the following details; <ul style="list-style-type: none"> • Part Number • Part Description 		
WARRANTY PLANNED PREVENTIVE MAINTENANCE:	Tenderers must carry-out a minimum of two times PPM per year during the equipment warranty, starting six months after the date of commissioning.		
TECHNICAL TRAINING:	Tenderers are required to conduct user training to the user(s)		
ON-SITE:	Tenderers to conduct training to Biomedical Engineers and Technicians. Training to be conducted locally, tenderers are required to: <ul style="list-style-type: none"> ○ Provide training materials, test equipment, demo equipments, etc. ○ Provide training to two groups of technical staffs. ○ Provide 2 days (minimum) of training for each group. ○ Training to be conducted at Dental chair installed location 		
AT MANUFACTURER'S PREMISES:	Training to be conducted at the manufacturer's training premises / facilities. Tenderers are required to; <ul style="list-style-type: none"> ○ Provide air tickets, accommodation, transportation, etc. for 2 persons. ○ Provide training for 2 persons. ○ Minimum no of days for training – 3 days. 		

1. We offer and undertake on your acceptance of our Tender to provide the above mentioned services in accordance with your Invitation To Tender.
2. Our Tender is fully consistent with and does no contradict or derogate from anything in your Invitation To Tender. We have not qualified or changed any of the provisions of your Invitation To Tender.
3. OUR OFFER IS VALID FOR **TWELVE (12)** CALENDAR MONTHS FROM THE TENDER CLOSING DATE.
4. When requested by you, we shall extend the validity of this offer.
5. We further undertake to give you any further information which you may require.

Dated this _____ day of _____, _____

Signature of authorised officer of Tenderer

Name:

Designation:

Tenderer's official stamp