



**KERALA MEDICAL SERVICES CORPORATION LTD**

*(Dept. of Health & Family Welfare, Govt. of Kerala)*

Thycaud P.O., Thiruvananthapuram-14, Kerala.

Tele: 0471-2945600, 2337353, Fax:0471-2945647

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Engineering Division

[www.kmscl.kerala.gov.in](http://www.kmscl.kerala.gov.in)

No. KMSCL/EP /603/2019

Date : 2/07 /2019

Managing Director

**Cyrix Healthcare Pvt. Ltd.**  
30/641B, Petta Jn., Poonithura,  
Kochi, Kerala-682038  
GSTIN: 32AAFCC2499H2ZM

Sir,

**WORK ORDER (I): WO-M-45-2019/2020**

Sub :- KMSCL – Fixing competing agency for obtaining AERB Compliance Certificate for the various Govt. Public Health Facilities – Work order-I issued for Facility Study -reg

- Ref :-
1. Tender No. KMSCL/EP/T317/1397/2019 dated: 18/03/2019
  2. Price bid notice no. KMSCL/EP/191/2019 dated: 04/05/2019
  3. Letter of Intent No. M-01 dated 18-06-2019

With reference to the Letter of Intent referred above, you have accepted the terms and conditions of the contract and executed the agreement and furnished Performance Security. You are requested to visit the locations mentioned in Annexure I and furnish gap analysis report format and BOQ form as per the rate, terms and conditions mentioned herein.

**1. Details of the works to be completed.**

Sl No	Item Description	Unit	Unit Rate with GST	Total facilities	Total Price
1	Cost of Compliance Study per Facility	No	7670.00	92	7,05,640.00

1. Terms and conditions:

- 1.1 The above rates mentioned in Sl. No 1 are in rupees with all taxes, duties and other charges like freight, installation charges, loading & unloading charges, handling charges etc.
- 1.2 The successful tenderer shall conduct the safety regulations survey across all facilities mentioned in the locations specified in schedule of requirements enclosed as annexure I. The equipment for which safety survey to be conducted in each locations is enclosed as annexure II.
- 1.3 Gap analysis study shall be done for all the X-ray generating equipment in an institution, separate rate will not be provided for each X-ray generating equipments in a facility to conduct gap analysis.
- 1.4 The supplier shall identify gaps from the AERB Regulations [Atomic Energy (Radiation Protection) Rules, 2004] as per the gap analysis report format enclosed as annexure IV.
- 1.5 The estimate shall be prepared in the BOQ form (Annexure V) for each location and furnish along with gap analysis report to KMSCL signed by the concerned Junior Consultant (Biomedical) & Superintendent.
- 1.6 On submission of ratified gap analysis report and BOQ form KMSCL shall issue work order (II) for the works and services required in each location.
- 1.7 The Gap analysis study and filled in BOQ form (estimate) shall be submitted within 12 weeks from the date of work order (I) for the 65 locations mentioned in tender which is also enclosed in Annexure I. Additional 12 weeks time is granted for furnishing the required report for the remaining 27 locations. The list is enclosed in Annexure I.
- 1.8 The estimate submitted should be comprehensive and shall cover all the requirements as per AERB guidelines. If any additional works are required to obtain AERB license the same shall also be mentioned separately in Gap analysis report and rate offered separately. The responsibility of obtaining AERB license after issuance of work order lies solely with the successful bidder. Additional rates will not be entertained after issuance of work order.
- 1.9 60% of the rate agreed for gap analysis study will be paid on submission on gap study report and BOQ estimate signed by the concerned.
- 1.10 Balance payment will be released on submission on AERB license for operation and final completion report.
- 1.11 Funds will be transferred by RTGS for which the following details have to be provided to the Corporation Beneficiary full name and address Bank account no. Bank branch and address IFSC code of the bank NEFT code of the bank.

- 1.12 In case of institution/facility is having a Lead Apron which is having defects, then the gap analyzes include the radiographic images of the Apron (inclusive serial number or identification number of Apron).
- 1.13 If any additional work which is not mentioned in the rate above is required the successful bidder shall inform such works separately along with the estimate.
- 1.14 Penalty of 0.5% of the contract value shall be levied for delay up to 15 days in competition of works as per work order and 1% of the contract value shall be levied for delay up to 16-30 days and 5% of contract value shall be levied for delay up to 31-45 days.
- 1.15 The contract may be terminated along with forfeiture of performance security and deduction of payment for the work completed if the delay is beyond 45 days.
- 1.16 Any deviance in the agreed terms and conditions will lead to imposition of penal clauses/ blacklisting or debarring your firm for a period of 3 years from the future tender of the corporation.

For MANAGING DIRECTOR



Dr. DILEEPKUMAR S.R.  
General Manager

Kerala Medical Service Corporation Ltd.  
Thycaud, Thiruvananthapuram - 14



Copy to

SMD, National Health Mission

Entrusted locations specified in Tender

ANNEXURE I

Schedule of Requirement

	Institution	
1	GH Trivandrum	Trivandrum
2	GH Neyyattinkara	
3	DMH Peroorkkada	
4	DH Nedumangadu	
5	TH Varkala	
6	TH Vithura	
7	TH Attingal	
8	CDH Pulayanarkotta	
9	CHC Kanyakulangara	
10	CHC Mayyanad	Kollam
11	TH Neendakara	
12	Chest Disease Hospital, Karunagapally	
13	THQH Mallapally	Pathanamthitta
14	THQH Konni	
15	DH Kozhenchery	
16	GH Pathanamthitta	
17	THQH Thiruvalla	
18	CHC Ranni, Perinad	

	Institution	
19	CHC Muthukulam	Alappuzha
20	THQH Kayamkulam	
21	TB Center Karuvatta	
22	GH Changanassery	Kottayam
23	THQH Vaikom	
24	GH Pala	
25	PHC Athirampuzha	
26	THQH Adimali	Idukki
27	DH Idukki	
28	DH Thodupuzha	
29	THQH Nedumkandom	
30	THQH Peermade	
31	CHC Rajakkad	
32	DH Aluva	Ernakulam
33	THQH North Paravoor	
34	CHC Kalady	
35	CHC Mulanthuruthy	
36	TH Angamaly	
37	CHC vengola	
38	THQH Kothamangalam	
39	THQH Perumbavoor	
40	CHC Kadayiruppu	

	Institution	
41	TB Center Thrissur	Thrissur
42	CHC Pazhayanoor	
43	THQH Alathur	Palakkad
44	DH Palakkad	
45	CHC Ambalappara	
46	CHC Challissery	
47	CHC Kondotty	
48	DH Tirur	Malappuram
49	THQH Nilambur	
50	TH Kuttippuram	
51	THQH Ponnani	
52	THQH Perinthalmanna	
53	TH Wandoor	
54	THQH Tirurangadi	
55	TB centre Manjeri	
56	W&C H Ponnani	
57	THQH Malappuram	
58	THQH Koyilandy	Kozhikode
59	GH Thalassery	Kannur
60	TH Iritty	
61	Th Panoor	

	Institution	
62	TH Panathady	Kasargod
63	CHC Periyé	
64	DH Kanhangad	
65	THQH Vythiri	Wayanad

Additional Locations

1	GH Adoor	Pathanamthitta
2	CHC Pampa	
3	THQH Kuruvilangad	Kottayam
4	GH Kottayam	
5	GH Kanjirappally	
6	THQH Kattappana	Idukki
7	THQH Chittur	Palakkad
8	THQH Mannarkkad	
9	GTSH Kottathara	
10	CHC Koduvayur	
11	CHC Agali	
12	THQH Pattambi	Kozhikode
13	TH Kuttiadi	
14	TH balussery	
15	THQH Sulthan Bathery	Wayanad
16	DH Mananthavady	
17	GH Kalpetta	

18	GH Ernakulam	Ernakulam
19	DH Mavelikkara	Alappuzha
20	THQH Pulinkunnu	
21	District TB Centre	
22	GH Chengannur	
23	THQH Haripad	
24	TH Kunnankulam	Thrissur
25	THQH Chalakudy	
26	GH Iringalakuda	
27	TH Pudukkad	

For MANAGING DIRECTOR

Dr. DILEEPKUMAR S.R.  
General Manager

Kerala Medical Service Corporation Ltd.  
Thycaud, Thiruvananthapuram - 14

b



ANNEXURE II

Schedule of Requirement

District	Institution	Equipment Name with make/ Model
Trivandrum	GH Trivandrum	a. C Arm b. Mobile x ray c. CT Scan
	GH Neyyattinkara	a. C-Arm S9e-Prognosys medical systems ltd. b. C-Arm, Thoshiba
	DMH Peroorkkada	a. X ray 300 mA GMHF 32 M/s.Medilux b. Dental X ray AXD 1070 D
	DH Nedumangadu	X ray 300 mA GMHF 32
	TH Varkala	X-Ray Machine 500mA - GMHF-80
	TH Vithura	X ray Allengers 15 KW,MARS -15
	TH Attingal	X ray Adonis AE 60 HF
	CDH Pulayanarkotta	X ray 500 mA Allengers 525
	CHC Kanyakulangara	X ray 300 mA Allengers 325FC
Kollam	CHC Mayyanad	X-Ray machine 300 ma, with image intensifying facility, Wipro GE
	TH Neendakara	Xray machine 300 mA – M/s. Allengers
	Chest Disease Hospital, Karunagapally	Portable 100 mA X-ray machine – M/s. Medilux
Pathanamthitta	THQH Mallapally	a. 300 mA X-ray - M/s. ELPRO b. Dental X-ray
	THQH Konni	Allengers 2.5 opel (HF) Portable X-ray
	DH Kozhencherry	a. Dental X-Ray – M/s. Confident Dental equipments Ltd

District	Institution	Equipment Name with make/ Model
		b. C-Arm Allengers Medical System Ltd Model- Allengers -HF-49R 100 MA, c. Mammography( fusion)- M/s Siemens
	GH Pathanamthitta	a. C-Arm Allengers HF 49 b. Dental X-ray
	THQH Thiruvalla	X-ray Allengers 300ma
	CHC Ranni, Perinad	X-ray machine GMHF-32
	GH Adoor	C-Arm
	CHC Pamba	Portable X-ray 100 MA
Alappuzha	CHC Muthukulam	X-Ray 300mA
	THQH Kayamkulam	a. C-Arm b. Portable X-Ray c. X-Ray 300mA
	TB Center Karuvatta	X-Ray 300mA
	DH Mavelikkara	a. C Arm, b. Dental X-ray c. X-ray
	THQH Pulincunnu	Portable X-ray
	DH District TB Centre	X-ray
	GH Chengannur	a. Portable X-ray – M/s Allengers b. C Arm - M/s Allengers
	THQH Haripad	a. C Arm, b. Mobile X-ray – M/s. BPL
Kottayam	GH Changanassery	a. X Ray Machine 300mA – GE b. 200 mA X-ray – M/s.Siemens
	THQH Vaikom	a. X Ray Machine 300mA

District	Institution	Equipment Name with make/ Model
		b. C-Arm image intensifier – M/s.Philips
	GH Pala	a. Conventional X Ray 300mA Model DX- 300 b. C-Arm image intensifier – M/s. Prognosis c. Portable X-ray 60 mA – M/s. Allengers
	PHC Athirampuzha	30 KW X-ray machine – M/s. Allengers
	THQH Kuruvilangad	30 KW X-ray machine – M/s. Allengers
	GH Kottayam	a. C-Arm Image intensifier – M/s. Allengers, b. Portable X-ray – M/s Simox plus, c. Dental X-ray – M/s. Confident Dental Equipments
	GH Kanjirappally	Carm image intensifier
Idukki	THQH Adimali	a. X-Ray Machine 400 MAHF. Model no.2K15020086DXH b. X - Ray Machine Portable - Allengers Opel 2.5 c. C Arm - Adonis AE60HFS -SN :180605 d. C Arm - Adonis AE60HFS SN : 180604
	DH Idukki	a. X - Ray Machine Fixed - Wipro GE - DX b. X - Ray Machine Portable - Allengers Opel 2.5525 c. C - Arm image Intensifier - Allengers HF – 49 d. Dental X ray Machine - Confident Dental - C 70D
	DH Thodupuzha	a. X - Ray Machine Fixed - Wipro GE - DX 300 Simplex b. X - Ray Machine Portable - Allengers Opel 2.5 c. X - Ray Machine Portable - Picks Medical - PDX 6010 A d. C - Arm image Intensifier - Allengers HF - 49
	THQH Nedumkandom	a. X Ray Machine Fixed- 500 ma,GMF - 80,Medilux Systems b. X - Ray Machine Portable - Allengers Opel 2.5

District	Institution	Equipment Name with make/ Model
		c. C -Arm image Intensifier- Allengers HF -149
	THQH Peermade	X- Ray Machine Fixed -SHIMADZU Medical India (P) Limited-Q Rad- FH 1251
	CHC Rajakkad	X - Ray Machine Fixed - Wipro GE - DX 300 Ma
	THQH Kattappana	30 KW X-ray - Medilux
Ernakulam	DH Aluva	a. Portable Xray,PICKS,PDX1010-D) b. C-arm,Mobile image intensifire,Allengers HF49
	THQH North Paravoor	a. X ray machine 500 ma, C-Arm b. Portable Xray,Adonics,ADONUS HF
	CHC Kalady	X ray 500 Ma -ALLENGERS/HF
	CHC Mulanthuruthy	X ray 500 Ma, Meditronics,
	TH Angamaly	Mammography unit ,BET medicals
	CHC vengola	X ray Machine 300 mA,wipro
	THQH Kothamangalam	C-arm,Mobile image intensifire,Allengers HF49
	THQH Perumbavoor	500 mA Xray-Meditronics,Diagonox 500 II
	CHC Kadayiruppu	300 mA Xray-ADONIS AE
	GH Ernakulam	a. C Arm fluoroscopy – M/s. Allengers, b. C-Arm – M/s. Prognosis
Thrissur	TB Center Thrissur	X-ray Machine ,GE 300mA
	CHC Pazhayanoor	X ray Machine
	TH Kunnankulam	C Arm
	THQH Chalakudy	C Arm, HF 49R-SR

District	Institution	Equipment Name with make/ Model
	GH Irinjalakkuda	X-ray machine – M/s. Epsilon
	TH Pudukkad	X-Ray 300 mA
Palakkad	THQH Alathur	X ray machine
	DH Palakkad	a. OPG b. Intra oral Peri apical Dental X-ray machine (IOPA), c. Portable X-ray 100 mA, d. Mammograme, e. Cathlab, f. CT (Thoshiba)
	CHC Ambalappara	X ray machine
	CHC Challissery	X ary machine Allengers
	THQH Chittur	Dental X-ray machine
	THQH Mannarkkad	a. Portable X-ray 60 MA – M/s. Medilux, b. C arm – M/s. Allengers, c. Dental X-ray machine
	GTSH Kottathara	a. Portable X-ray machine 100 MA, b. C arm – M/s. Thoshiba
	CHC Koduvayur	X- Ray 300 MA – M/s. Siemens
	CHC agali	X-Ray 300 MA – M/s. Dianox
	THQH Pattambi	a. X-Ray 300 MA, b. Portable X-ray
Malappuram	CHC Kondotty	Mobile x ray- L& T
	DH Tirur	a. Fixed Xray -Allengers 325 FC b. Mobile x ray-Allengers 60mA, Opel 2.5 c. C Arm- Allengers HF49R d. Dental X Ray- Biodent 1070D e. CT- Siemens Somatom spirit

District	Institution	Equipment Name with make/ Model
	THQH Nilambur	a. Fixed Xray - GME, GMHF32 b. Mobile x ray- Adonis,AE60 HF c. C Arm- Allengers,HF49R
	TH Kuttippuram	Mobile Xray-BPL
	THQH Ponnani	a. Fixed Xray- GE ,DX300 b. C Arm- Allengers,HF 49R
	THQH Perinthalmanna	a. Fixed X ray- Allengers b. C Arm- Allengers,HF49R c. Dental X Ray- confident,C-70D/E/F d. Dental X Ray- Iatom electric,Alerio DC
	TH Wandoor	a. Fixed xray- GE DX 300 b. Dental X Ray- confident,C-70 D
	THQH Tirurangadi	a. Fixed X ray- Allengers,326R-SR b. C Arm- Allengers,HF49R
	TB centre Manjeri	Fixed XRay-ALLENTERS ,Mars-30
	W&C H Ponnani	Fixed Xray - GME 500mA
	THQH Malappuram	a. Allengers ,300mA b. Adonis,60HF
Kozhikode	THQH Koyilandy	a. Allengers(portable) AL/SAC 2.5KV 60MA 05356, b. C Arm – M/s.Allengers c. Dental X ray machine – M/s. Confident Dental Equipment
	TH Kuttiyadi	WIPRO 300 MA-DX-300
	TH Balussery	Dental X-ray
Kannur	GH Thalassery	PRORAD PREMIUM CARM BPL
	TH Iritty	Portable X ray -Allengers opel 2.5
	Th Panoor	X ray Machine -Allengers 325 FC /Horizon

District	Institution	Equipment Name with make/ Model
Kasargod	TH Panathady	X Ray Machine Elpro International/SRD 300
	CHC Periyé	X Ray Machine, Allengers
	DH Kanhangad	a. PORTABLE X ray-Picks Mobile,PDX-1010 D b. Dental X ray-Allens AX-1070 D c. C Arm-Allengers HF 49
	THQH Vythiri	a. x-ray 300 mA, b. Portable X-ray – M/s. Allengers c. C Arm image intensifier – M/s. Allengers
Wayanad	DH Mananthavady	RVG M/s. Confident Dental
	THQH Sulthan Bathery	a. Portable X-ray – M/s. Allengers b. X-ray 300 mA
	GH Kalpetta	X-ray 300 mA – M/s. Allengers

Note: If any other X-ray generating equipment is available in the hospitals mentioned above but not specifically mentioned here, you shall conduct facility study for such equipments also and furnish gap analysis report and BOQ form without any additional cost.

For MANAGING DIRECTOR

Dr. DILEEPKUMAR S.R.

General Manager

Kerala Medical Service Corporation Ltd.

Thycaud, Thiruvananthapuram - 14





## Annexure V

### KMSCL - BOQ

<b>Hospital Name :</b> <b>Address :</b> <b>Ph. No :</b> <b>Contact person:</b> <b>Mob. No.</b>	<b>Name of the Firm :</b> <b>Name of representative :</b> <b>Mob :</b> <b>Date :</b>				
<b><u>Area / Location/ work details : Fixing competing agency for obtaining AERB Compliance Certificate for the various Govt. Public Health Facilities</u></b>					
Tender No. KMSCL/EP/T317/1397/2019 Dt. 18/03/2019					
Sl. No	Name of item as per Running Contract of KMSCL	Units	Unit Rate	Qty	Total
1	Cost of Lead Apron gown	1 No	10,080		
2	Cost Warning Lights	1 No	2,800		
3	Cost of one TLD badge as per AERB Regulations and as mentioned in tender)	1 No	1,180		
4	Cost of Lead Lining for Doors & door frames as per AERB Regulations	1 Sq Mtr	7,280		
5	Cost of providing new lead lined door panel including the fixing charges and all fittings needed for completion	1 Sq Mtr	11,200		
6	Cost of lead lining in the wall behind the chest stand as per AERB specification	1 Sq Mtr	10,640		
7	Cost of installation of Lead Glass as per AERB Regulations including the frames and all fixtures	1 Sq Mtr	5,600		
8	Cost Protective (Mobile) 3 fold lead barriers with Viewing glass	1 No	43,120		
9	Cost of free standing Chest Stand	1 No	5,600		
10	Cost of Signage for Display of Radiation Hazard	1 No	280		
11	Cost of conducting Quality Assurance Test / Calibration (X-Ray)	1 No	12,390		
12	Cost of conducting Quality Assurance Test / Calibration (Dental X-Ray)	1 No	1,003		
13	Cost of conducting Quality Assurance Test / Calibration (Portable X Ray)	1 No	1,003		
14	Cost of conducting Quality Assurance Test / Calibration (C Arm)	1 No	10,030		
15	Cost of conducting Quality Assurance Test /Calibration (mammography)	1 No	1,003		
16	Cost of conducting Quality Assurance Test /Calibration (CT Scanner)	1 No	1,003		
17	Cost of conducting Quality Assurance Test /Calibration (Cath Lab)	1 No	1,003		
18	Civil Work Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in: Cement mortar 1:6 (1 cement : 6 coarse sand)(from floor 2 level up to floor 5 level)	1 Cum	944		
19	PLASTERING : 12 mm cement plaster of mix : 1:6 (1 cement: 6 fine sand)	1 Sq Mtr	177		
20	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade: Two or more coats on new work	1 Sq Mtr	35.4		
21	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead : Of area 3 sq. metres and below	1 each	59		

Sl. No	Name of item as per Running Contract of KMSCL	Units	Unit Rate	Qty	Total
22	Dismantling aluminium/ Gypsum partitions, doors, windows, fixed glazing and false ceiling including disposal of unserviceable surplus material and stacking of serviceable material with in 50 meters lead as directed by Engineer-in-charge.	1 Sq Mtr	59		
23	Cost associated with obtaining of "License for operation" from AERB per facility	1 No	7,080		
24	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately), using good quality Anjili wood /jack wood (Not taken for evaluation)	0.10 Cum	11,800		
25	Providing and fixing paneling or paneling and glazing in paneled or paneled and glazed shutters for doors, windows and clerestory windows (Area of opening for panel inserts excluding portion inside grooves or rebates to be measured) paneling for paneled or paneled and glazed shutters 25 mm to 40 mm thick using good quality Anjili/ Jack wood	1 Sq Mtr	2,124		
				Total	

### DECLARATION

Hereby we declare that no works/items other than the above are required for obtaining the AERB license

Signature of representative :

Signature of Hospital Authorities/enduser :

Date:

Date:

Seal :

Seal :

**KERALA MEDICAL SERVICES CORPORATION LTD**  
**GAP STUDY FORMAT**

Hospital Name:		
<b>I. BASIC DETAILS</b>		
I	Gap Study Form Number Installation Location	:
II	Type of facility	:
III	Facility Name	:
IV	Type of machine	:
V	Analog/Digital	:
VI	Model Number	:
VII	Name of Manufacturer	:
VIII	Installation Date	:
IX	Working Status	:
<b>II. AERB Approval</b>		
I	Type Approval (Specify the availability & type approval number)	:
II	Layout Approval (Specify whether layout approval received from AERB/DRS)	:
III	Procurement Permission (Specify whether available)	:
IV	AERB Registration / Licence (Specify availability of registration, if yes specify the number & validity period)	:
<b>III. Infrastructure</b>		
I	Room Size	:
II	Presence ventilation/Windows	:
III	Mention Civil modification if any	:

IV	Machine Orientation :
V	Availability of Lead line :
VI	Details of Lead line Modification required :
VII	Lead Apron(qty) (Health Worker) :
VIII	Lead Apron (qty)(Patient) :
IX	Three fold Lead protection barrier (Yes/No) :
X	Chest Stand (Yes/No) :
XI	Warning Light (Yes/No) :
XII	Signage of Radiation Hazard (Yes/No) :
XIII	Requirement of lead glass (Yes/No) :
XIV	Availability of valid QA (Yes/No) :
XV	No. of QA done so far :

#### IV. Human Resources

I	Radiologist :
II	Radiographer (No of persons) :
III	Availability of TLD Badge :
IV	Additional requirement of TLD Badge :

#### V. Declaration by the agency

Hereby we certify that all the defects as per AERB guidelines are mentioned above and confirm that by rectifying the same AERB License can be obtained .

Signature of Representative:	Signature of Radiographer :	Signature of Biomedical Engineer:	Signature of Hospital Superintendent/ Medical Officer:
Date:	Date:	Date:	Date:
Seal :	Seal :	Seal :	Seal :