

Response To Pre-Bid Queries (Pre-Bid date: 01.03.2023)

GeM Tender ID:GEM/2023/B/3174420

Item Name: State-of-the Art Advanced Low-Energy Ring-Gantry Linear Accelerator system with Turnkey Facility

Sr. No.	Tender Specification Page & Para	TENDER SPECIFICATION	REPRESENTATION RECEIVED FROM THE FIRM	Reply to Pre-bid Queries
1	Page 2	Page no 1& 2, Ring-Gantry Linear accelerator The equipment should be a 6 MV ring gantry-type medical linear accelerator LINAC with a supporting Treatment Planning System.	Request to amend it as mentioned below: Ring-Gantry/ C-arm gantry Linear accelerator.The equipment should be a 6 MV ring gantry-type or C-arm gantry type medical linear accelerator LINAC with a supporting Treatment Planning System.	No change considered
2	Page 1	Page no 1, Point No 2, subpoint no 5 The offered linear accelerator shall be installed in at least 2 (preferably five) cancer centers/hospitals across in India with more than 1 year in clinical operations at the time of bidding.	Request for amendment as per below “The offered linear accelerator shall be installed at least at 1 hospital/cancer centre across India with NOC from AERB in place at the time of bidding. “	No change considered
3	Page 1	Page no 1, Point No 2 and sub point no 6 The offered linear accelerator should be capable of integrating and merging with the existing OIS and Treatment planning Please delete this point as this only allows existing vendor to quote due to integration and merging requirement in existing Oncology Information System (OIS) and TPS	Please delete this point as this only allows existing vendor to quote due to integration and merging requirement in existing Oncology Information System (OIS) and TPS	No change considered Integration is essential with existing OIS system to avoid erroneous data transfer between two different vendors systems.
4	Page 2	Page no 2 & 3, Point no 3 under Technical Specifications of Linear Accelerator-Flattening-Filter-Free Beams	Please amend this to “The LINAC shall be capable of delivering 6 MV Photon Energy with or without flattening filter-free (FFF) mode”	No change considered
5	Page 2	Page 2, Point no 3 under Technical Specifications of Linear Accelerator Beam Quality-FFF Beams The offered photon beam energy with FFF should meet the below Specifications Dmax (cm)2 : 1.3 ± 0.2 Depth dose at 10 cm (%) : 63 ± 1.0 Dynamic beam flatness (%) : 3.5 Symmetry (%) ≤ 2.0 Maximum planned treatment size at isoplane (28 x 38.5 cm2 field intensity at 10cm depth (measurement at three points from the central axis for 10X10 cm2 and 30x30 cm2or above).	These values are vendor-specific. Request you to kindly remove the specific values against each parameter so that we can specify our values. Please amend this to “ Please specify range against each parameter of the Linac model offered”	No change considered

6	Page 3	Page no 3, Dose Rate	Amendment requested as per below: 500 MU/min or higher dose rates, please specify	Amended as:- Dose rate: 500 MU/min or higher
7	Page 3	Page no.3, point no.3 Technical specification of Linear accelerator, Ring gantry linear accelerator, 1The equipment should be a 6 MV ring gantry-type medical linear accelerator LINAC with a supporting Treatment Planning System	Kindly Amend as:- The equipment should be a 6 MV/ 6MV FFF ring gantry-type medical linear accelerator LINAC with a supporting Treatment Planning System.	The equipment should be a 6 MV and 6MV FFF ring gantry-type medical linear accelerator LINAC with a supporting Treatment Planning System.
8	Page 3	Page no.3 Date of Manufacturing b.) Demonstration of the quoted model (Machine) at a working clinical site is mandatory for validating the compliance statement submitted by the vendor and an undertaking for the same has to be given by the vendor.	During Customer Acceptance Test, our engineer will demonstrate all the offered specifications on the installing site itself. Dedicated & Customised specifications cannot be validated at some other clinical site. Hence, Hence, kindly amend as:- Demonstration of the quoted model (Machine) shall be performed at the site after the Machine installation with respect to the offered specifications submitted by the vendor and an undertaking for the same has to be given by the vendor.	No change considered
9	Page 3	Page no.3 Beam Geometry/Maximum field size. Point no. 2. Field Size for cone beam: 36 x 28 cm2 (or more)-	Kindly amend as : Field Size for cone beam: 28x28cm2	Amended as:- Field Size for cone beam: 28 x 28 cm2 (or more)-
10	Page 4	Page no.4 Radiation Leakage Limit: Neutron leakage: The neutron leakage rate should not exceed 0.2% expressed in neutron dose equivalent (Sivert) when added to the photon leakage for a 10 x 10 cm field at the isocenter at any point one meter from the target when the jaws are closed-	Kindly delete this point. Neutron leakage is only applicable to the energy greater than 10 MV.	Amended as:- DELETED
11	Page 4	Page 4, Radiation Leakage Limit Photon leakage: The photon leakage rate at any point one meter from the target outside the cone defined by the primary x-ray collimator shall be less than 0.1% of the absorbed dose at the isocenter.	Request to amend it as mentioned below: Photon leakage: The photon leakage rate at any point one meter from the target outside the cone defined by the primary x-ray collimator shall be less than 0.2% of the absorbed dose at the isocenter.	Photon leakage: The photon leakage rate at any point one meter from the target outside the cone defined by the primary x-ray collimator shall be less than 0.2% of the absorbed dose at the isocenter.
12	Page 4	Page no. 4, The available gantry rotation speed should be 4 RPM or more	Request to amend it as mentioned below: "The available gantry rotation speed should be 1 RPM or more"	No change considered
			Should be removed. Justification: The overall speed of delivery of the machine based on treatment time and imaging time has to be considered rather than the RPM	Not considered

13	Page 4	Page no.4 Mechanical to Radiation isocenter accuracy < 1 mm	Kindly Delete this point. One cannot check the mechanical isocentre because the design of the machine is such a way that Mechanical front pointer is not applicable to our ring gantry linac, & also it has no field light & no optical distance indicator. We have a completely image based automatic patient positioning. Hence, please delete this point as well.	Amended as :- DELETED
			Kindly delete this point. One cannot check the mechanical isocentre because the design of the machine is such a way that Mechanical front pointer is not applicable to our ring gantry linac, & also it has no field light & no optical distance indicator. We have a completely image based automatic patient positioning. Hence, please delete this point.	
14	Page 4	Page no 4, Rotation Per Minute at least 4 RPM for treatment and imaging	Should be removed Justification: Increasing the gantry speed does not have any significance in reducing the overall treatment time as the quoted model comes with patented stereotactic imaging which reduces the imaging time and inturn the overall treatment time	No change considered
			Should be removed Justification: Increasing the gantry speed does not have any significance in reducing the overall treatment time as the quoted model comes with patented stereotactic imaging which reduces the imaging time and in turn the overall treatment time	No change considered
			kindly delete this repeating point, already asked in the gantry rotation speed.	No change considered
			Request to amend it as mentioned below: "Rotation Per Minute at least 1 RPM for treatment and imaging"	No change considered
15	Page 4	Page no 4 Patient positioning Laser System	Please amend this to " Inbuild Three lasers co-align to the virtual isocenter should be provided or lateral wall mounted 3 laser lights for localization to be provided"	No change considered
16	Page 5	Page 4, Type of MLC Dual layer MLC	Request to remove this specification as it is vendor specific.	Amended as:- Please specify MLC size of the offered model, preferably to perform IMRT, VMAT, SRT , SBRT.

17	Page 5	Page 5, MLC, Field Size Should have Maximum planned treatment size at isoplane (cm)28 x 38.5 & minimum field size: 0.1 cm x 0.1 cm	Cannot be frozen as per one manufacturer	No change considered
			Cannot be frozen as per one manufacturer	
			Request to amend it as mentioned below: “MLC, Field Size Should have Maximum planned treatment size at isoplane (cm)28 x 38.5 or more & minimum field size: 0.5 cm x 0.5 cm”	
18	Page 5	Page no 5 Collimator rotation speed (RPM) (Maximum)	This is again vendor specific , request you to amend this to following: “ Please specify your range”	No change considered
19	Page 5	Page 5 Leaf Height: Leaf height should be 16 cm Field Penumbra: In-plane versus cross-plane penumbra (mm) ≤ 1.0 Transmission: ≤ 0.25%, Maximum leaf speed,; Should have leaf speed (cm/sec) at least 5.0	The values are vendor-specific. Request you to kindly remove the specific values against each parameter so that we can specify our values, so please amend this to “Please specify your range”	Amended as:- Please specify leaf height of the offered model and inter leaf , Intra leaf transmission.
			Leakage radiation to be considered not Leaf height. Justification: Leaf height should not be the criteria, but the leakage radiation should be the criteria	
20	Page 5	Page no.5 Dosimetric Leaf Gap (DLG) Should be proximal 0.17 mm and distal 0.18 mm.	Kindly Delete this point, Our product is a pre-commissioned machine. Hence DLG cannot be edited or modelled manually in eclipse. Therefore, kindly delete.	Amended as:- DELETED
21	Page 5	Leaf Height: Leaf height should be 16 cm	kindly amend this to - The leaf height to be at least 7cm. Note: No vendor has 16cm leaf height in the industry.	Amended as:- Please specify leaf height of the offered model and inter leaf , Intra leaf transmission.
			Leakage radiation to be considered not Leaf height Justification: Leaf height should not be the criteria, but the leakage radiation should be the criteria	
22	Page 5	Page 5, Imaging Area and resolution Min 43X43 cm with 1280 X 1280 resolution	Request to amend it as mentioned below: “Imaging Area and resolution Min 41X41 cm with 1024 X 1024 or more resolution”	No change considered
23	Page 5	Page 5, Primary Beam Shielding Integrated beam stopper with adequate thickness to attenuate primary beam as per NCRP report No. 151 should be offered	Request to remove this point as it is vendor-specific.	Amended as:- DELETED

24	Page 5	Page 5, Imaging Capabilities	Please remove word “ iterative” from specifications as this is specific to a particular vendor . Kindly amend it as mentioned below. “kV CBCT and all other imaging capabilities/ features (2D and 3D) available with the quoted machine model should be provided.”	Amended as:- kV CBCT and all other imaging capabilities/ features (2D and 3D) available with the quoted machine model should be provided
25	Page 6	Page 6, 1. Weight limit with image-guided radiation therapy (IGRT) 2. couch top bearing capacity : Minimum 200 Kg 3. Couch top width (cm) :53 cm 4. Couch top length (cm) : 200 cm 5. IGRT couch top water equivalence (cm): 0.52 and 0.84 6. 6 MV attenuation (%) :1.9% 7. Relative positioning accuracy (cm) ≤ 0.05 cm 8. Longitudinal positioning accuracy (cm) ≤ 0.1 cm 9. Degrees of freedom :3 10. Lateral travel range (cm) : ± 20.9 cm 11. Vertical travel range (cm) : - 47.0 to 0 cm 12. Longitudinal travel range (cm) : 0.0 to 165.5 cm 13. Travel range accuracy (cm) : ± 0.2 cm 14. Lowest couch height above floor (cm) : 63.0 cm	The values are vendor-specific. Request you to kindly remove the specific values against each parameter so that we can specify our values. so please amend this to“Please specify your range” 1. Weight limit with image-guided radiation therapy (IGRT): 160 kg 1. Weight limit with image-guided radiation therapy (IGRT): 160 kg	Amended as:- Page 6, 1. Weight limit with image-guided radiation therapy (IGRT) 2. couch top bearing capacity : Minimum 160 Kg 3. Couch top width (cm) : 50 cm or more 4. Couch top length (cm) : 200 cm or more 5. DELETED 6. DELETED 7. DELETED 8. DELETED 9. DELETED 10. DELETED 11. DELETED 12. DELETED 13. DELETED 14. DELETED
26	Page 6	10. Lateral travel range (cm): ± 20.9 cm	Cannot be frozen as per one manufacturer but as per treatment deliverables Cannot be frozen as per one manufacturer but as per treatment deliverables	Amended as:- 10. Lateral travel range (cm): ± 20 cm or more
27	Page 6	12. Longitudinal travel range (cm): 0.0 to 165.5 cm	Cannot be frozen as per one manufacturer but as per treatment deliverables Cannot be frozen as per one manufacturer but as per treatment deliverables	12. Longitudinal travel range (cm): 0.0 to 165 or more

28	Page 6	14. Lowest couch height above floor (cm): 63.0 cm	Cannot be frozen as per one manufacturer but as per treatment deliverables	14. Lowest couch height above floor (cm): 65.0 cm or less
			Cannot be frozen as per one manufacturer but as per treatment deliverables	
29	Page 6	Page no 6, under “ Networking- point no 1 & 2, The LINAC should compatible with the existing ARIA OIS system Able to transfer treatment plans from existing EclipseTPS	Please delete this point as these are specific to Varian, ARIA and Eclipse are product names of M/s Varian	Amended as:- The offered model should be compatible with the existing TPS and OIS installed in the department.
30	Page 7	Page no.;7 Dose Calculatio Algorithms, 3. The supplied TPS should have a Multi-Criteria Optimization Algorithm (MCO) and be implemented on a Graphical Processing Unit (GPU) based computer HW	Kindly amend as The supplied TPS should have a Real Time Trade-Off Exploration Multi-Criteria Optimization Algorithm (MCO) and be implemented on a Graphical Processing Unit (GPU) based computer HW.	Amended as:- The supplied TPS should have a Real Time Trade-Off Exploration Multi-Criteria Optimization Algorithm (MCO) and be implemented on a Graphical Processing Unit (GPU) based computer HW.
31	Page 7	Page 7, The supplied TPS should have a Multi-Criteria Optimization Algorithm (MCO) and be implemented on a Graphical Processing Unit (GPU) based computer HW	Request to amend it as mentioned below: “The supplied TPS should have a Multi-Criteria Optimization Algorithm (MCO)	No change considered
32	Page 7	Page 7, The supplied TPS should support knowledge-based automatic planning features 1. The system should be capable to produce a DVH estimation model based on created plan library or expert library. 2. The system should use the estimation DVH model to predict new patient-specific DVH. DVH prediction should automatically create objectives for optimization. 3. The system should allow the user to train a model-based library of patient plans.	Request to amend it as mentioned below: The supplied TPS should support knowledge-based/Template-based automatic planning features	Amended as:- The supplied TPS should support knowledge-based/ Template-based automatic planning features

33	Page 8	<p>page no.8 Routine QA Phantom Should include phantoms that can be used for routine machine and patient-specific QA tests specified by AERB as well as to create image value-to-density tables for planning and for assessments of MVCT image quality</p>	Kindly move this to dosimetry items list	To be shifted to dosimetry list.
34	Page 9	<p>Page 9, 8. In-Bore Optical Surface Imaging System</p>	<p>Request to kindly modify the specifications under this heading to be vendor neutral. In-bore SGRT is vendor specific. Instead request to amend it as Optical surface imaging system.</p>	<p>Amended as:- The bidder should provide In-Bore/Outside the bore Optical Surface Imaging System compatible with offered model with all necessary licence.</p>
35	Page 9	<p>Page no.9 point no.8 8. In-Bore Optical Surface Imaging System Out of three numbers of LINAC, One no of In-Bore Optical Surface Imaging System should be provided along with only one number of Linear accelerator. The Vender should provide an Optical Surface Imaging system for Surface Guided Radiation Therapy for Patient setup, Positioning, Intra Fraction motion monitoring and patient safety applications with the latest version of optical surface guided system based on a stereovision system having three camera pods to be installed in the treatment room for assisting with patient set up and additional two miniature cameras mounted on a ring fitted into the bore / focused inside the bore of the Ring Gantry L for live patient monitoring aiding in reduced shadow effect of coverage without affecting normal functioning of the Ring Gantry or interfere with its radiation field. The latest model camaras available with the quoted model to be supplied. System should have an accuracy for Absolute-positioning accuracy ≤ 0.5 mm / $\leq 0.2^\circ$, Motion-monitoring accuracy ≤ 0.5 mm / $\leq 0.2^\circ$ for both outside bore and in bore cameras. System shall use reference surface image relative to the treatment ISO centre positioning automatic 6DOF of translation and rotational directions.</p>	<p>Kindly amend as below:- In-Bore/Outside the bore Optical Surface Imaging System Kindly amend this also as : For each linac, one system each of In Bore/Outside the Bore Optical Surface Imaging System should be provided along with only one number of Linear accelerator. The Vender should provide an Optical Surface Imaging system for Surface Guided Radiation Therapy for Patient setup, Positioning, Intra Fraction motion monitoring and patient safety applications with the latest version of optical surface guided system based on a stereovision system having three camera pods to be installed in the treatment room for assisting with patient set up and additional two miniature cameras mounted on a ring fitted into the bore / Outside the bore focused inside the bore of the Ring Gantry L for live patient monitoring aiding in reduced shadow effect of coverage without affecting normal functioning of the Ring Gantry or interfere with its radiation field. The latest model camaras available with the quoted model to be supplied. System should have an accuracy for Absolute-positioning accuracy ≤ 0.5 mm / $\leq 0.2^\circ$, Motion-monitoring accuracy ≤ 0.5 mm / $\leq 0.2^\circ$ for both outside bore and in bore cameras. System shall use reference surface image relative to the treatment ISO centre positioning automatic 3DOF of translation directions.</p>	No change considered

36	Page 2	Type approved: The machine must be AERB type approved for the energy quoted.	The machine must be AERB type approved/ NOC for the energy quoted. Justification: For Indian Machine AERB has given NOC and the machine is listed on e-LORA.	No change considered
37	Page 4	Gantry Rotation Speed: The available gantry rotation speed should be 4 RPM or more	Should be removed Justification: The overall speed of delivery of the machine based on treatment time and imaging time has to be considered rather than the RPM	No change considered
38	Page 5	Integrated portal dosimetry: Fully integrated portal dosimetry for patient specific QA should be offered	Cannot be frozen as per one manufacturer Justification: The quoted model consists of a patented In-Gantry Dual kV Imaging system which can acquire images in 2D, CBCT, and Stereo modes. With kV imaging, the overall dose to the patient is reduced. The overall treatment time is reduced	No change considered
			Cannot be frozen as per one manufacture. Justification: The quoted model consists of a patented In-Gantry Dual kV Imaging system which can acquire images in 2D, CBCT, and Stereo modes. With kV imaging, the overall dose to the patient is reduced. The overall treatment time is reducedr	
39		Treatment Planning system (TPS) – 2 nos per machine: Automated Planning. The supplied TPS should support knowledge-based automatic planning features	We request the removal of this feature as this is machine learning planning and has been written for the specific manufacturer.	no change considered
			We request the removal of this feature as this is machine learning planning and has been written for the specific manufacturer.	
40		1. The system should be capable to produce a DVH estimation model based on created plan library or expert library. License: For DVH based plan converter and RT plan review to be provided	There is no clarity on if we need to offer one or two speciality licenses for each workstation, kindly provide clarity on the same.	Clarified as:- all the licence should be available in all TPS.
			There is no clarity on if we need to offer one or two speciality licenses for each workstation, kindly provide clarity on the same.	
		Routine QA Phantom: Should include phantoms that can be used for routine machine and patientspecific QA tests specified by AERB as well as to create image value-todensity tables for planning and for assessments of MVCT image quality	Should include phantoms that can be used for routine machine and patient-specific QA tests specified by AERB as well as to create image valueto- density tables for planning and for assessments of MVCT/kVCT image quality. Justification: The requirement has to be generic	Amended as:- Routine QA Phantom: Should include phantoms that can be used for routine machine and patientspecific QA tests specified by

41		Should include phantoms that can be used for routine machine and patient-specific QA tests specified by AERB as well as to create image value-to-density tables for planning and for assessments of MVCT/kVCT image quality. Justification: The requirement has to be generic	AERB as well as to create image value-to-density tables for planning and for assessments of CBCT image quality.
42	Portal Imaging detectors: Portal Imaging System - Both Imaging Detectors (kV and MV) should be replaced free of cost during the warranty period & CAMC period as and when the image quality deteriorates from the quality at the time of acceptance. Vendor should provide portal dosimetry feature.	Imaging System - Both Imaging Detectors (kV/kV or kV/MV) should be replaced free of cost during the warranty period & CAMC period as and when the image quality deteriorates from the quality at the time of acceptance. Vendor should provide dosimetry feature. Justification: The requirement has to be generic	no change considered
43	Equipment certification: 1. Type approval AERB	Type Approval/ NOC from AERB. Justification: For Indian Machine AERB has given NOC and the machine is listed on eLora Type Approval/ NOC from AERB. Justification: For Indian Machine AERB has given NOC and the machine is listed on eLora	no change considered
44	Page no.20 BBQ serial no.8 In-Bore Optical Surface Imaging System as per specification Note : Out of three numbers of LINAC, only one LINAC should be supplied with In-Bore Optical Surface Imaging System	Kindly amend as: In-Bore/Outside the bore Optical Surface Imaging System as per specification Note : Out of three numbers of LINAC, only one LINAC should be supplied with In-Bore/Outside the bore Optical Surface Imaging System.	No change considered
45	page no.10 Laser Systems (treatment room) External Laser Alignment System and Gantry integrated laser for patient positioning. Green lasers are preferred. The line width should be less than 1mm. The lasers should be adjustable with remote control.	Kindly amend as:- External Laser Alignment System or In-built Gantry integrated laser for patient positioning. Green lasers are preferred. The line width should be less than 1 mm. The lasers should be adjustable with remote control.	Amended as:- External Laser Alignment System or In-built Gantry integrated laser for patient positioning. Green lasers are preferred. The line width should be less than 1 mm. The lasers should be adjustable with remote control.
46	Please provide Number of Contouring system and ARIA to be mentioned	In the tender document, page no.7, only TPS number 2 is mentioned but not elaborated how many contouring systems and how many OIS are required. Hence, please suggest.	Clarified as:- For each machine 02 TPS and 03 OIS should be offered.

47		General query: Turn-Key works BOQ	Please provide exact BOQ for the Turn- Key works along with the area/ quantity, etc. for fair price comparison. Civil work area is not mentioned in the document	Total area for installation of 03 nos of LINAC will be around 7,000 sqft which include LINAC treatment room, control room, equipment room, change room, UPS room, TPS room, waiting area, chiller room. Payment will be made on pro rata basis. Bidders are
48	Page 13; Point: 2	The cost of the facility site modification work should be quoted separately, and this cost will be considered for L1 calculation	As there is no exact BOQ is given and unit rates are asked for many items, we request to exclude TK cost from L1 calculation	
49		Drawings	Please share AERB approved layout of linac bunker and allied areas in Auto CAD format	It is clarified that bidder may collect soft copy of layout/drawings from NCI-AIIMS.
50		Payment terms	We request payment terms for Turnkey scope as follows: Option 1 <input checked="" type="checkbox"/> 55% advance along with PO. <input checked="" type="checkbox"/> Balance 45% to be paid on actual measurement sheet certification against RA bills. Option 2 <input checked="" type="checkbox"/> 80% advance along with PO against BG of same amount <input checked="" type="checkbox"/> 20% on machine installation.	No change considered
51		TK Completion time	We would request a minimum time period of 210 days from the date of LC opening or handover of complete shell as per AERB SLA or import authorization approval from AERB, whichever is later.	No change considered
52		Regulatory works, local administered works, Statuary works	We would not be able to do any local regulatory follow-ups, approvals, etc.	No change considered
53		NA	General Points: 1) Please share the details of permanent power load and DG availability for machine and supports 2) Is this a lump-sum contract or Item rate? If item rate, then what is the process of rate approval of any extra items if required during the project? 3) Hospital must provide construction water and power supply at point of use (at site) free of cost. 4) What are the LD clauses? There is no mention of any such clause in tender. 5) What would be the procedure to get a site visit prior to submission of bid? 6) Hospital to provide complete structural core and shell of bunker ready as per AERB approved layout and provide structural stability certificate of the same	It is the responsibility of the bidder to visit site for assessment of work as per requirement of the offered model.

54	Page 6, Point 8	8. Transfer of all parameters from existing X-ray simulator , CT-simulator, MRI, PET-CT, etc, and Treatment Planning System for automatic treatment setup & delivery should be provided	Please note that the Networking infrastructure between quoted equipment and the hospital network (within premises)will be provided in the turnkey. However, hospital will arrange necessary Licenses & accessories from 3rd party vendor for smooth transfer of required parameters from 3rd party equipment to the Varian equipment.	Amended as:- 8. Transfer of all parameters from existing CT-simulator, MRI, PET-CT, etc, and Treatment Planning System for automatic treatment setup & delivery should be provided
55	Page 8, point 7, Date of Completion of the Installation	The date of completion of customer acceptance of all the items in the purchase order or Turn Key accepted and signed by the Engineering Division, whichever is later will be considered as the date of Completion of the Installation.	Equipment installation and turnkey installation & acceptance should be considered separately. The institution / Customer needs to sign the acceptance certificate immediately after the completion of equipment CAP. ☑ Please clarify the signing authority from Engineering Division. ☑ Date of completion of Turnkey – Accepted & signed by engineering division or AERB approval for clinical use whichever is earlier	No change considered
56	Page 10, UPS	Online UPS (having spike protection) for the whole equipment including computer systems / workstations / accessories / server room shall be provided. The backup for the UPS shall be at least 30 minutes.	We believe a UPS back up of 15 mins would suffice. Hence, the same can be changed from 30 minutes, if agreeable.	Online UPS (having spike protection) for the whole equipment including computer systems / workstations / accessories / server room shall be provided. The backup for the UPS shall be at least 15 minutes.

57	Page 9	<p>The Vender should provide an Optical Surface Imaging system for Surface Guided Radiation Therapy for Patient setup, Positioning, Intra Fraction motion monitoring and patient safety applications with the latest version of optical surface guided system based on a stereovision system having three camera pods to be installed in the treatment room for assisting with patient set up and additional two miniature cameras mounted on a ring fitted into the bore / focused inside the bore of the Ring Gantry L for live patient monitoring aiding in reduced shadow effect of coverage without affecting affect normal functioning of the Ring Gantry or interfere with its radiation field. The latest model camaras available with the quoted model to be supplied. System should have an accuracy for Absolute-positioning accuracy ≤ 0.5 mm / $\leq 0.2^\circ$, Motion-monitoring accuracy ≤ 0.5 mm / $\leq 0.2^\circ$ for both outside bore and in bore cameras. System shall use reference surface image relative to the treatment ISO centre positioning automatic 6DOF of translation and rotational directions.</p>	<p>The Vender should provide an Optical Surface Imaging system for Surface Guided Radiation Therapy for Patient setup, Positioning, Intra Fraction motion monitoring and patient safety applications with the latest version of optical surface guided system based on a stereovision/structured system having three camera pods to be installed in the treatment room for assisting with patient set up and for providing optimum patient coverage without affecting affect normal functioning of the Ring Gantry or interfere with its radiation field. The latest model cameras available with the quoted model to be supplied. The system should not be affected with ambient lights in room. System should have an accuracy for Absolute-positioning accuracy ≤ 0.5 mm / $\leq 0.2^\circ$, Motion-monitoring accuracy ≤ 1 mm / $\leq 0.2^\circ$ for all cameras. System shall use reference surface image relative to the treatment ISO centre as well as calculate the live ISOCenter for positioning and have 6DOF patient monitoring.</p> <p>Comments:- The current specifications are favouring one vendor only. - We offer Structured light system which provides better accurate depth measurement and works better in low light environment. - The system should not be affected by ambient room lights. - SGRT mounted outside the gantry eliminates risk of collisions from patient while improving clinical workflow</p>	No change considered
58		System should be capable to perform rigid registration along with a range of different skin tones (at least 5) which can be changed on a single click adjustment	System should be capable to perform rigid/non rigid registration along with a range of different skin tones. Comments: The specification are very company specific . Rigid Registration is very specific.	No change considered
59		The supplied system should have atleast 30+ systems installed globally with ring based linear accelerators in reputed institutes.	The system should have proven installation base globally with reputed institutes. Comments:- Please remove as this is specific to only one company	Amended as : DELETED
60		Additional Specification	System should be able to provide audio and video coaching for patients through tablet	Not considered

61	NA	<p>Also find below generic specifications which can be used for the same . Request you to please use the below for healthy competition</p> <ul style="list-style-type: none"> o Advance SGRT solution with latest generation 3 cameras that captures and analyzes the patient body surface all time o The high definition cameras continuously monitor 3D surfaces and compare current body posture to a previously recorded reference. o The system covers the entire body surface and provides the technician with interactive visual guidance through a color map projected during setup. o The camera should have exceptionally larger field of view so that the full picture of the treatment at the setup outside the gantry as well as at the treatment inside the gantry is captured. o The system should have large scan volume, projection and the advanced registration property so that entire workflows can be supported. o The positioning must be within 0.5mm for a rigid body. o The system should also be able to support both DIBH activation and 6 DOF patient monitoring. The system should support breath hold and free breathing mode, optimising breathing patterns throughout the treatment. o The workflow must be patient centric with augmented reality colour projection, real time feedback and audio visual feedback. 	Not considered
Commercial Queries			
	Tender currencies	<p>We request you to kindly amend the same as:</p> <ul style="list-style-type: none"> - For imported goods which are supplied directly from abroad, prices shall be quoted in any freely convertible currency say US Dollar, Euro, GBP or Japanese Yen. 	No change considered

Page 17 ATC	<p>Page 17/44 Clause 21 of Additional Terms and Conditions</p> <p>Terms and Mode of Payment</p> <p>Payment Terms</p> <p>Payment shall be made through electronic transfer in NEFT/RTGS subject to recoveries, if any, by way of liquidated damages or any other charges as per terms & conditions of contract in the following manner:</p> <p>A) Payment for Indigenous Goods (M&E). Payment shall be made in Indian Rupees as specified in the contract in the following manner:</p>	<p>We request you to kindly add the below point:</p> <p>Payment for Imported Goods:</p> <p>Payment for foreign currency portion shall be made in the currency as specified in the contract in the following manner:</p> <p>On Shipment:</p> <p>75% of the net CIP price (CIP price less Indian Agency commission) of the goods shipped shall be paid through irrevocable, non-transferable Letter of Credit (LC) opened in favor of the supplier in a bank in his country</p> <p>b) On Acceptance:</p> <p>Balance payment of Twenty Five percent (25%) of net CIP price of goods would be made against 'Final Acceptance Certificate' as per Section XVIII to be issued by the consignees through irrevocable, non-transferable Letter of Credit (LC) opened in favour of the Foreign Principal in a bank in his country or within 180 days from date of shipment whichever is earlier.</p>	No change considered
Page 19 ATC	<p>Page 19/44, Clause 23 of Additional Terms and Conditions</p> <p>Liquidated damages:</p>	<p>We request you to change penalty/LD from 0.5% per week of delay to 0.25% per week of delay.</p>	No change considered
Page 2	<p>Page 2/7 of Bid Document:</p> <p>Duration of ePBG required (Months). 62 Months</p>	<p>We request you to kindly amend the same as:</p> <p>Within 30 days of formal site handing over by the respective consignee. Purchaser/Consignee, the supplier, shall furnish a performance security in the prescribed proforma to the Purchaser for an amount equal to three percent (3%) with initially valid for a period of minimum 36 months from the date of formal site handing over by the respective consignee.</p>	No change considered
	<p>LIMITATION OF LIABILITY.</p> <p>The Seller's total liability to the Buyer arising under or in connection with this contract shall be limited</p>	<p>We request you to kindly add the same as:</p> <p>Suppliers' total liability should be maximum up to the value of contract so we would request to incorporate this clause.</p>	No change considered

Page 24	Pg 24 of 44 of Additional Terms and Conditions SECTION- V:Required Delivery Schedule -Supply, Installation, Commissioning, Testing & Acceptance to be completed within 120 days from the date of approval of Layout Drawing or from date of handing over the site for installation, whichever is later	PI amend the same as: Delivery Days- We request you to amend the same as: - 270 days minimum for the Imported Goods as there are certain approvals required from AERB, which are time consuming and there is no control of supplier over these approvals. Also, this involves site modification work as well. Considering these points and facts, we request you to increase this delivery and commissioning schedule from 120 days to 270 days from date of opening of LC.	Required Delivery Schedule -Supply, Installation, Commissioning, Testing & Acceptance to be completed within 120 days from the date of approval of Layout Drawing or from date of handing over the site for installation, whichever is later
Page 5	Page 5 of 7 of Bid Document 98% uptime warranty during CMC period on 24 (hrs) X 7 (days) X 365 (days) basis	PI amend the same as: 95% uptime warranty during CMC period on 24 (hrs) X 7 (days) X 365 (days) basis excluding Govt holidays	No change considered
Page 6	Page 6 of 7 of Bid Document GST shall be included in the CMC Charges quoted	PI amend the same as GST shall be excluded in the CMC Charges quoted and on actuals as applicable at the of payment.	No change considered. It is clarified to the firms that ranking of bids is to be done including the GST charges
Page 1	Site modification/Turnkey Details	Please provide the AERB approved drawings same	It is the responsibility of the bidder to visit site for assessment of work as per requirement of the offered model.
Page 4	Page 4, (Minimum 50% and 25% Local Content required for qualifying as Class 1 and Class 2 Local Supplier Respectively)	Please note that the tender per se restricts participation only for local suppliers based in the country. However, all our components including the machine is imported and therefore we do not qualify as a Class 1 or, a Class 2 supplier. Therefore, we suggest to change the tender to be made a global tender for us to enable our participation as well to make it a equitable one.	No change considered

		Payment Terms	<p>Since the tender is through GeM, we believe the bidding currency, in this case, would be INR. However, the supply of Equipment contract will be executed by Varian Medical Systems AG. (VMS AG). But, VMS AG cannot take the order in INR since INR is not a fully convertible currency & hence cannot be remitted outside India, as per FEMA guidelines. Please note without this change we would not be able to participate in the tender. Therefore, the tender needs to be quoted & paid in USD only for us to participate.</p> <p>On conversion of the tender in foreign currency, we would need a 100% irrevocable confirmed Letter of Credit at sight, payable as follows: 80 % on Bill of Lading & balance 20% against acceptance and commissioning or, 180/120 days from the shipment/Bill of Lading, whichever is earlier, against an equivalent PBG.</p> <p>The customs duty would be paid extra by the buyer directly to the customs at the time of import and there would be no re imbursement possible to be claimed.</p>	No change considered
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