**PROCUREMENT OF RADIOTHERAPY AND DIAGNOSTIC EQUIPMENT, BELGRADE**

**(PROCUREMENT NO. IOP/36-2019/RD)**

**CLARIFICATION NO. 3**

Issued on April 15, 2020

Regarding the list of questions that the Purchaser, Public Investment Management Office Belgrade, No. 11 Nemanjina street, have received from the potential bidders, concerning the procurement procedure: Procurement of Radiotherapy and Diagnostic equipment, Belgrade no. IOP/36-2019/RD, we give you the following answers:

1. In your Bidding Documents, for lot 2, ID 2, under item 1.1 you defined the following: Gantry aperture – min 78 cm

Due the fact that this kind of restrictive definition completely excludes the devices of the newer generation of reputable manufacturers, please redefine your request as follows and make the process competitive:

Gentry aperture at least 78 cm (tolerance +/- 8%)

In case you do not accept our request, please explain to us why the gentry size needs to be 78 cm?

Answer: Change is not acceptable.

Keeping in mind the purpose of equipment under ID no. 2: “Multislices CT scanner for diagnostics and RT procedures”, technical request under Item 1.1 made according to objective clinical needs and to satisfy both, diagnostic and radiotherapy purpose. Anyhow, the system will be used mainly for diagnostic purpose, but in case of malfunction or out of scope of existing CT simulator, should be a back-up system for radiotherapy - CT simulation. Therefore, in case of examination/ CT simulation of the patients with immobilization equipment, bigger aperture of gantry is highly recommended.  Technical request has been defined in that way that system can serve diagnostic and radiotherapy, in order to save costs (instead to buy two CT systems). Such system can examine higher number of the oncology patients and in the same time have CT simulation. It is not eliminatory to offer gantry size bigger than 78cm. Also, three worldwide producers of CT scanner can fulfil this request and this specification is easily met by high-end CT scanners on the market.

2. In your Bidding Documents, for lot 2, ID 2, under item 2.3 you defined the following: The lowest position of the table max 55 cm

Is it acceptable for the Contracting Authority to modify the requirement to: The lowest position of the table max 65 cm. By allowing minimal deviation in this way, the Contracting Authority will certainly not lose out on the functionality or quality of the device itself.

In case you do not accept our request, please explain to us why the lowest position of the table needs to be 55 cm or lower.

Answer: Change is not acceptable.

As we said in previous answer, CT scanner will be mainly used for diagnostic purpose of oncology patients, and as a back-up system for radiotherapy purpose – CT simulation.  Oncology patients are the most severe patients and very often with very limited movements and serious condition. Sometimes they are in a stretcher or wheelchairs. To have the best possible comfort for the patients and technician during transport of such patients and transfer on the patient table for examination, patient table should not be so high in lowest position. Also, three worldwide producers of CT scanner can fulfil this request and this specification is easily met by high-end CT scanners on the market.

3. Your Bidding Documents fail to define the number of detector rows that the offered model of computed tomography system needs to have. It is these parameters that also determine the class of device, and these values define and distinguish computed tomography systems, and it is important how much information the user receives, especially given the pediatric studies and the sensitivity of diagnostics of our youngest patients.

Please define your min requirements for detector rows."

Answer:

From the clinical perspective, the most important features of the CT system are high image quality, speed and the lowest dose for all patients. All three parameters are covered with technical specification requested. The three CT components with the greatest impact on image quality are the X-ray source, detection system and reconstruction algorithms, also covered with technical specification. Any hardware like number of detector rows itself will not provide information like number of acquired and reconstructed slices per one rotation (we let possibility for several producers, with their different technology to participate) independent of number of detector rows and their technology to provide required number of acquired and reconstructed slices, which are asked under item 5.2 and 5.3. Number of acquisition and reconstruction slices will distinguish class of computed tomography systems. In addition, under Item 5.1 it is requested quality of detector system, which must be the latest technology, and the detector itself will classify the CT system too.

4. In your Bidding Documents, for lot 2, ID 2, under item 1.4 you defined the following: The shortest rotation time for one single full rotation of scanning (360°) max. 0.3 sec

Is it acceptable for the Contracting Authority to modify the requirement to: The shortest rotation time for one single full rotation of scanning (360°) max. 0.35 sec? By allowing minimal deviation in this way, the Contracting Authority will certainly not lose out on the functionality or quality of the device itself. If you do not accept our proposal, please explain what procedures cannot be performed using rotation time of 0,35 sec.

Answer: Change is not acceptable.

Also, as we mentioned, subject of procurement is CT scanner for diagnostic and RT purpose for examination of most severe oncology patients. It is common that serious patients have problems with breathing, sometime are unconscious and cannot control the breathing. The fastest rotation is on crucial importance to achieve the fastest examination and the highest possible image quality without artifacts for precise and efficient diagnosis, especially important for the patients with lung cancer, where lung lesion can “move” during breathing.

Refer to your question, is not matter on providing any oncology procedure, but it is matter on quality of providing any procedure, examinations speed and precise diagnosis with high quality images without artifacts.

CT technology has recently enabled high-speed gantry rotation time of 0,3sec or less, con­tributing to the high temporal resolution important for all above mentioned examinations, also pediatric.

Also, three worldwide producers of CT scanner can fulfil this request and this specification is easily met by high-end CT scanners on the market.

5. In your Bidding Documents, for lot 2, ID 2, under item 5.3 you defined the following: Min. 256 reconstructed slices, independent on number of detector rows or producer’s technology

In the previous point you requested: Min. 128 acquisition slices, independent on number of detector rows or producer’s technology. Reconstruction is just as important as acquisition. For this reason, most of the world-renowned manufacturers have the same speed of reconstruction and acquisition. The requirement defined in this way does not make sense and unjustifiably favors only one CT system manufacturer. Please modify this request to: Min. 256 reconstructed slices, independent on number of detector rows or producer’s technology, or a previous request to: Min. 256 acquisition slices, independent on number of detector rows or producer’s technology.

Answer: Change is not acceptable.

As we mentioned, we would not go into any producer’s technology and several systems with the latest technology have well developed reconstruction systems. It is very important to use possibility that computer reconstruction systems can provide more information in images.  Image reconstruction has fundamental impact on image quality and therefore on radiation dose. For a given radiation dose it is desirable to reconstruct images with the lowest possible noise without sacrificing image accuracy and spatial resolution.

We would not go into detail how each of the producers develop their technology and would not eliminate any of them by defining the reconstruction principle, but possibility not to over-radiate patients during acquisition and have more information according to reconstruction technology is simple benefit for the patients. This specification is easily met by high-end CT scanners on the market

It is not eliminatory and will not exclude any producer/bidder to offer systems more than 128 acquisition slices or more than 256 reconstruction slices.

6. In your Bidding Documents, for lot 2, ID 2, under item 10 you defined the following: External laser system

We kindly ask the Contracting Authority to delete this requirement from the tender documents if the CT device is intended for diagnostic purposes.

Answer: Change is not acceptable.

It is clearly defined that the subject of ID 2 is Multislices CT scanner for diagnostic and RT procedures. Due to fact that system will be used also for radiotherapy purpose for CT simulation, external laser systems are crucial for identifying isocenter location, sending coordinates and data to treatment planning system and contouring and patient marking in RT planning procedure.

7. Your tender documents for Lot 2, ID1, item 3.2 request the following: Number of physical coil elements that can be simultaneously connected during one exam, minimum 146

Is it acceptable to the Contracting Authority to modify the requirement to: Number of physical coil elements that can be simultaneously connected during one exam, minimum 108?

By simultaneously connecting 108 coil elements, the Contracting Authority will be able to perform all the necessary procedures. If you do not accept our suggestion, please explain what procedures require connection of more than 108 elements?

Answer: Request is partially acceptable.

The main reason to have possibility to connect many coil elements simultaneously is patient comfort and shorter exam time (not necessary to reposition coils during exam). Also, this technical requirement is defined according to Customer objective clinical needs at the moment and also taking care about eventual future system upgradeability. Related with this, we would also like to mention that under point 5.1, it is defined “Maximal scan range- min 200cm”, which means that system should be able to support whole body imaging. It makes us opportunity for the future to purchase (if it would be clinically necessary - pheripheral angiography coil) and easily perform whole body imaging without patient nor coils repositioning. It means if we would have e.g Head coil 32 elements, Body coil 30 elements, Spine 24 elements and PA coil which usually has minimum 36 elements among vendors who can offer that coil, connecting them together brings us to 122 simultaneously connected elements.

Hence, request 3.2 is changed as follows: “Number of physical coil elements that can be simultaneously connected during one exam, minimum 122”. However there are vendors who can offer several 3T latest generation systems who can meet minimum of 122 simultaneously connected coil elements during one exam as well as 146 and even higher.

8. Your tender documents for Lot 2, ID1, item 4.5 request the following: Separate, multi-channel flex coil of them, different sizes) with minimum 4 elements each for the imaging of smaller joints

Is it acceptable to the Contracting Authority to modify the requirement to: Separate, multi-channel flex coils (two of them, different sizes) with minimum 2 elements each for the imaging of smaller joints"

Answer: Change is not acceptable.

Customer defined the minimum number of coil elements each flexible coil offered should have in order to reach optimal clinical performance and image resolution. Customer already use in practice and dialy routine exams flex coils with 4 coil elements. These coils are optimal for the imaging that customer performs and customer request is based on clinical experience. Also, almost all vendors have flexible coils different sizes for requested purpose, with 4 elements or more.

9. Your tender documents for Lot 2, ID 6, item 1.3  request the following: Integrated Touch screen diagonal size min. 13“on control panel

Is a modification acceptable to the Contracting Authority to read as follows: Integrated Touch screen diagonal size min. 13“( +/-1’’) on control panel

A minimal modification, with allowed deviation of 1'', will not affect the clinical operation of the device, nor is the size of the touch screen itself crucial to the diagnostic quality of the device image. The minimal modification is intended to allow greater competitiveness in the public procurement procedure while keeping the premium class of ultrasound device.

Answer: Yes, it is acceptable.

Technical requirement 1.3 is changed as follows:

“Integrated Touch screen diagonal size min. 13“( +/-1’’) on control panel”

Although few producers can offer several latest generation ultrasound systems with integrated touch screen of 13” or more..

10. Your tender documents for Lot 2, ID 6, item 1.15 request the following: Strain elastography which provides a qualitative representation of relative tissue stiffness for the region of interest. Available on both offered linear probes

Is a modification acceptable to the Contracting Authority to read as follows:  Strain elastography which provides a qualitative representation of relative tissue stiffness for the region of interest. Available on min. one offered linear probes

The requirement that the required elastography be available on both linear probes offered is merely an eliminatory factor, since it is not possible to operate with both probes simultaneously. In addition, the Contracting Authority also requested that two linear probes be offered, according to the frequency range we can say that one is for vascular and the other for soft superficial tissues including breast and the thyroid - and therefore elastography on the probe examining carotids in clinical practice has not found application anywhere in the world."

Answer: Change is not acceptable.

Customer is University oncology institute who is performing a lot of breast and thyroid ultrasound exams with different pathologies. Customer asked for 2 linear probes, one with lower frequency range (for deeper structures and lesions in breast and thyroid) and one with higher frequency range (for superficial structures in breast and thyroid). From customer experience, in some cases we need lower frequency in order to visualize deeply positioned lesions, and in some high frequency probe is enough. It is cruicial for customer to have in both cases (on both linear probes) ability to perform Strain elastography which provides a qualitative representation of relative tissue stiffness for the region of interest.

11. Your tender documents for Lot 2, ID 6, item 1.19, request the following: 2D linear multifrequency probe with frequency range of min 3-9 MHz with minimum 384 elements

Is a modification acceptable to the Contracting Authority to read as follows: 2D linear multifrequency probe with frequency range of min 3-9 MHz with minimum 320 acoustic elements

A minimal modification will not lead to a change in the diagnostic quality of the device image, it aims at allowing the participation of more interested bidders.

Answer: Yes, it is acceptable.

Technical requirement 1.19 is changed as follows:

“2D linear multifrequency probe with frequency range of min 3-9 MHz with minimum 320 elements”

Although few producers can offer several latest generation ultrasound systems who has  linear probes, so called matrix probes, with 384 elements and more

12. Your tender documents for Lot 2, ID 6, item 1.22 request the following: Integrated gel warmer on the system

Is it acceptable to the Contracting Authority an external gel warmer to be delivered with the device? A minimal modification will not lead to a change in the clinical operation of the device.

Answer: Change is not acceptable.

Integrated gel warmer is comfortable solution for patient as well as for operator. Integrated gel warmer is part of the system even ultrasound system is moved from one to another room. Also, as integrated solution it gets power supply directly from the system. Such solution is part of ultrasound system and as such approved by producer. We would like to mention that almost all vendors can offer latest generation ultrasound systems with integrated gel warmer.

13. Your tender documents for Lot 2, ID 6, item 2, request the following: Table for US examination

Is it acceptable to the Contracting Authority to exclude item 2. ( 2.1-2.6) from the lot of the ultrasound device and set it as a separate lot, because it conditions and restricts competitiveness in the public procurement procedure to those bidders who, in addition to ultrasound devices, also have an ultrasound table - and there are no two or more like that to be able to satisfy the competitiveness in the public procurement procedure.

Answer: Request is partially acceptable.

Table for ultrasound examination is necessary to be offered. There are many examination tables vendors who are producing examination tables which can be used for ultrasound exams as well. In order not to make restrictions regarding competition and at the same time to secure to get the table with minimum required functionalities in order to provide ultrasound exams on it, items 2.1-2.6 are removed from minimal technical requirements.

Item 2 is changed as follows:

“Table for ultrasound examination with following functionalities: width: min 65 cm, length: min 195 cm, electric height adjustment, head section adjustment, paper roll holder”

14. Your tender documents for Lot 2, ID 6, item 1.12 request the following: Technology for fully automated detection of lesions and anatomical structures in 2D mode (based on automatic border detection technology or equivalent) and automatic measurements of area and diameter.

Is a technology acceptable to the Contracting Authority for the detection of lesions and anatomical structures in 2D mode based on automatic recognition of borders?

Answer: Technical request 1.12 is as follows: “Technology for fully automated detection of lesions and anatomical structures in 2D mode (based on automatic border detection technology or equivalent) and automatic measurements of area and diameter”. It is requested automatic detection. If the potential bidder can offer requested functionality with equivalent technique such as automatic recognition of borders, it is also acceptable for purchaser.

15. Your tender documents for Lot 2, ID 7, Item 1.4 request the following: Control console with a minimum 10"" TFT LCD touch panel, height adjustment and swivel

Is a touch panel production in LCD technology acceptable to the Contracting Authority?"

Answer. Yes it is acceptable

16. Your tender documents for Lot 2, ID 7, item 1.5 request the following: It is possible to assign measuring functions to the alphabet keys on the keyboard.

Is it acceptable to the Contracting Authority to assign measuring functions on touch screen?

We believe that the intention of the Contracting Authority is to simplify the operation of the device with this function, not to eliminate the competition equipped with equally valuable technology on the premium ultrasound device thereof.

Answer: Request is partially acceptable.

Item 1.5 is changes as follows: “It is possible to assign measuring functions to the alphabet keys on the keyboard or touch screen”

17. Your tender documents for Lot 2, ID 7, item 1.10 request the following: Digital video input / output: min. 2 DVI channels

Is a minimum modification acceptable to the Contracting Authority so that it reads as follows:  Min. 2 Digital video input / output

This also allows the next-generation devices with modern digital input/output connections to participate in the public procurement procedure.

Answer. Yes it is acceptable.

Item 1.10 is changed as follows: “Min. 2 Digital video input / output”

18. Your tender documents for Lot 2, ID 7, item  1.13 request the following: At least 60,000 images in the cineloop sequence.

Is cineloop storage of 2.200 frames acceptable to the Contracting Authority?

We believe that this type of storage has no diagnostic effect on the clinical operation of the device.

Answer: Change is partially acceptable.

Certain amount of cine memory is required to review the saved sequence of frames and manipulate with them. This can be particularly useful when scanning the very old patient or the patient who may be uncooperative.

Item 1.13 is changed as follows: “At least 12,000 images in the cineloop sequence.”

Almost all vendors can offer latest generation ultrasound systems with cine memory of minimum 12.000 images

19. Your tender documents for Lot 2, ID 7, item 1.14 request the following: Integrated gel warmer.

Is it acceptable to the Contracting Authority an external gel warmer to be delivered with the device? A minimal modification will not lead to a change in the clinical operation of the device."

Answer: Change is not acceptable.

Integrated gel warmer is comfortable solution for patient as well as for operator. Integrated gel warmer is part of the system even ultrasound system is moved from one to another room. Also, as integrated solution it gets power supply directly from the system. Such solution is part of ultrasound system and as such approved by producer. We would like to mention that almost all vendors can offer latest generation ultrasound systems with integrated gel warmer.

20. Your tender documents for Lot 2, ID 7, item 1.20 request the following: Shear Wave elastography available on the offered convex probe and compression elastography available on all offered probes. Possibility of combined display of compression elastography and share wave elastography, as well as evaluation of the stage of liver fibrosis by both methods and obtaining a joint report.

Is a minimum modification acceptable to the Contracting Authority so that it reads as follows:  Shear Wave elastography available on the offered convex probe and compression elastography available on min. one offered linear probe. Possibility of combined display of compression elastography and share wave elastography.

The Contracting Authority cannot work with multiple probes at the same time anyway, and thus with elastography on multiple probes at the same time either - the requirement defined in this way allows the user to have both required types of elastography and to be able to use them depending on the region of exam, without limiting competition in the public procurement procedure."

Answer: Change is not acceptable.

As the request says, the main reason for the request of this functionality is combined display of compression elastography and share wave elastography. For liver lesions we are using convex probe. For customer it is crucial to have both shear wave as well as strain elastography on this probe, enabling evaluation of the stage of liver fibrosis by both methods and obtaining a joint report. This functionality brings more reliable clinical diagnostic results.

21. Your tender documents for Lot 2, ID 7, item 1.21 request the following: Synchronized display of volume data sets imported from MRI, CT or PETCT simultaneously in MPR reconstruction (on split screen) with real-time ultrasound. Following functions are supported:

Combined display with compression elastography;

Is possible to import a minimum 3 and not 4 different data sets for the same patient and change them during the examination;

Displays the puncture guide line on virtual images, with a 3-axis display;

Body Motion Tracking / auto fusion;

A color map superimposed on the CT image simulates the distribution of electric current from the given location of the multiple electrodes;

Tracks and displays the needle tip location in real time during RFA procedures.

Is a modification acceptable to the Contracting Authority so that the item reads as follows:

Synchronized display of volume data sets imported from MRI, CT or PETCT simultaneously in MPR reconstruction (on split screen) with real-time ultrasound. Following functions are supported:

Combined display with compression elastography;

Is possible to import a minimum 3 different data sets for the same patient and change them during the examination;

Displays the puncture guide line on virtual images, with a 3-axis display;

A color map superimposed on the CT image simulates the distribution of electric current from the given location of the multiple electrodes;

Tracks and displays the needle tip location in real time during RFA procedures.

The item defined in this way also enables the participation of other interested bidders, without limiting competition, with the achievement of an equivalent identical technology of other ultrasound device manufacturer.

Answer: Request is partially acceptable.

The Item 1.21 is changed as follows:

Synchronized display of volume data sets imported from MRI, CT or PETCT simultaneously in MPR reconstruction (on split screen) with real-time ultrasound. Following functions are supported:

Combined display with compression elastography;

Is possible to import a minimum 3 different data sets for the same patient and change them during the examination;

Displays the puncture guide line on virtual images, with a 3-axis display;

Body Motion Tracking;

A color map superimposed on the CT image simulates the distribution of electric current from the given location of the multiple electrodes;

Tracks and displays the needle tip location in real time during RFA procedures.

Body Motion Tracking is important functionality for clinical practice enabling operator more comfortable work and make him focus on the patient and procedure rather then on the system.

Several vendors can offer latest generation ultrasound systems with this functionality.

22. Your tender documents for Lot 2, ID 7, item 1.34 request the following: Linear probe for soft tissues, frequency range 5-13 MHz or wider, wide min. 50mm.

Is a linear probe for soft tissues, frequency range from 5 to 12, wide 50mm acceptable to the Contracting Authority?"

Answer: Yes, it is acceptable.

Item no. 1.34 is changed as follows: “Linear probe for soft tissues, frequency range 5-12 MHz or wider, wide min. 50mm”

23. Your tender documents for Lot 2, ID 7, item 2, request the following: Table for US examination

Is it acceptable to the Contracting Authority to exclude item 2 ( 2.1-2.6) from the ultrasound device lot and set it as a separate lot, because it conditions and restricts competitiveness in the public procurement procedure to those bidders who, in addition to ultrasound devices, also have an ultrasound table - and there are no two or more like that to be able to satisfy the competitiveness in the public procurement procedure.

 Answer: Request is partially acceptable.

Table for ultrasound examination is necessary to be offered. There are many examination tables vendors who are producing examination tables which can be used for ultrasound exams as well. In order not to make restrictions regarding competition and at the same time to secure to get the table with minimum required functionalities in order to provide ultrasound exams on it, items 2.1-2.6 are removed from minimal technical requirements.

Item 2 is changed as follows:

“Table for ultrasound examination with following functionalities: width: min 65 cm, length: min 195 cm, electric height adjustment, head section adjustment, paper roll holder”

24. Your tender documents for Lot 2, ID 8, item 1.5 request the following: Integrated Touch screen diagonal size min. 13“on control panel

Is a modification acceptable to the Contracting Authority to read as follows: Integrated Touch screen diagonal size min. 13“( +/-1’’) on control panel

A minimal modification to this item of 1'' will not affect the clinical operation of the device, nor is the size of the touch screen itself crucial to the diagnostic quality of the device image. The minimal modification is intended to allow greater competitiveness in the public procurement procedure while keeping the premium class of ultrasound device.

Answer: Yes, it is acceptable.

Technical requirement 1.5 is changed as follows:

“Integrated Touch screen diagonal size min. 13“( +/-1’’) on control panel”

Although few producers can offer several latest generation ultrasound systems with integrated touch screen of 13” or more..

25. Your tender documents for Lot 2, ID 8, item 1.8 request the following: Integrated Gel Warmer

Is it acceptable to the Contracting Authority an external gel warmer to be delivered with the device? A minimal modification will not lead to a change in the clinical operation of the device.

Answer: Change is not acceptable.

Integrated gel warmer is comfortable solution for patient as well as for operator. Integrated gel warmer is part of the system even ultrasound system is moved from one to another room. Also, as integrated solution it gets power supply directly from the system. Such solution is part of ultrasound system and as such approved by producer. We would like to mention that almost all vendors can offer latest generation ultrasound systems with integrated gel warmer.

26. Your tender documents for Lot 2, ID 8, item 1.15 request the following: CINE Function: The system shall perform CINE Function, 12.000 cine images minimum

Is cineloop storage of 2.200 frames acceptable to the Contracting Authority?

We believe that this type of storage has no diagnostic effect on the clinical operation of the device."

Answer: Change is not acceptable.

Certain amount of cine memory is required to review the saved sequence of frames and manipulate with them. This can be particularly useful when scanning the very old patient or the patient who may be uncooperative.

Almost all vendors can offer latest generation ultrasound systems with cine memory of minimum 12.000 images

27. Your tender documents for Lot 2, ID 8, item 1.22 request the following: Convex Probe: Frequency range: min. 1 – 7 MHz, number of elements min. 160, single crystal or matrix technology.

Is a modification to this item acceptable to the Contracting Authority so that it reads as follows: Convex Probe: Frequency range: 1 – 5 MHz or wider, number of elements min. 160, single crystal or matrix technology.

A minimal modification will not affect the clinical quality of the device/probe.

Answer: Yes, it is acceptable.

Technical requirement 1.22 is changed as follows:

“Convex Probe: Frequency range: 1 – 5 MHz or wider, number of elements min. 160, single crystal or matrix technology”

28. Your tender documents for Lot 2, ID 8, item 1.23 request the following: Linear Probe: Frequency range: min. 3 – 12 MHz, number of elements min.256, min., FOV max. 50mm

Is a modification to this item acceptable to the Contracting Authority so that it reads as follows: Linear Probe: Frequency range: min. 4 – 12 MHz, number of elements min.256,  min., FOV max. 50mm

A minimal modification will not affect the clinical quality of the device/probe.

Answer: Yes, it is acceptable.

Technical requirement 1.23 is changed as follows:

“Linear Probe: Frequency range: min. 4 – 12 MHz, number of elements min.256,  min., FOV max. 50mm”

29. Your tender documents for Lot 2, ID 8, item 1.24 request the following: Frequency range: min. 2 – 9 MHz, number of elements min.192,  min., FOV max.45mm

Is a probe with the range from 3 to 12 MHz with 160 crystal elements and FOV 38mm acceptable to the Contracting Authority?

Minimal deviations will not affect the clinical quality of the device/probe."

Answer: Yes, it is acceptable.

30. Your tender documents for Lot 2, ID 8, item 2, request the following: Table for US examination

Is it acceptable to the Contracting Authority to exclude item 2 ( 2.1-2.6) from the ultrasound device lot and set it as a separate lot, because it conditions and restricts competitiveness in the public procurement procedure to those bidders who, in addition to ultrasound devices, also have an ultrasound table - and there are no two or more like that to be able to satisfy the competitiveness in the public procurement procedure.

Answer: Request is partially acceptable.

Table for ultrasound examination is necessary to be offered. There are many examination tables vendors who are producing examination tables which can be used for ultrasound exams as well. In order not to make restrictions regarding competition and at the same time to secure to get the table with minimum required functionalities in order to provide ultrasound exams on it, items 2.1-2.6 are removed from minimal technical requirements.

Item 2 is changed as follows:

“Table for ultrasound examination with following functionalities: width: min 65 cm, length: min 195 cm, electric height adjustment, head section adjustment, paper roll holder”

31. Your tender documents for Lot 2, ID 3 request the following: Diagnostic workstation in client – server architecture, with server and 10 clients computer(workstations), with 2D, 3D basic and advanced visualization applications from different modalities MR, CT, X-ray system, ultrasound

Taking into account that that 10 clients are to be acquired, is it necessary to have all the required tools available at the same time and are they supposed to have multi-vendor access (access to devices from different manufacturers). Otherwise, you are not acquiring ten competing workstations with all the tools you need, but only one workstation, because only one radiologist can work with one tool at a time on one workstation. In other words, the offered tool will not be available simultaneously for use on other workstations. Please confirm whether all required tools are to be available at the same time on all workstations?

Also, thus required diagnostic tools for ID 3 are defined according to only one manufacturer. We kindly ask the Contracting Authority to allow the possibility of offering equivalent solutions by adding ""or equivalent solution"" next to each technology. In this way, the Contracting Authority will retain all required functionalities while allowing more than one bidder to submit a correct bid as it will fulfill all required clinical functionalities.

Answer: Technical specification is precisely defined according to Customer objective clinical needs. Under point 1.43, it is defined that all applications listed (required) 1.1-1.38 are installed on server and are accessible on all 10 clients. All basic applications which should be used in 90% of daily work on our clinic defined under items 1.1 – 1.14 should be available at the same time on all 10 clients-workstations. Advanced applications items 1.15 – 1.38 should be accessible from all 10 clients, but not necessary simultaneously on all 10 clients.

Potential Bidder should take care that offered system (Diagnostic workstation in client- server architecture) and requested functionalities and software options 1.1-1.38 should serve all related modalities requested in this Lot. That is the reason why it is of crucial importance that item no. 3- diagnostic workstation, should be in the same lot with other requested modalities, in order to secure proper functionality for whole department of all medical devices requested in this lot.

All technical requirements and functionalities of requested tools are described in detail under points 1.1-1.38. All solutions- software options and tools from different vendors will be acceptable if they meet requested functionalities.

32. Your tender documents for Lot 2, ID 3, item 1.31 request the following: MR Spectroscopy evaluation (Single voxel spectroscopy, Chemical Shift imaging)

We kindly ask the Contracting Authority to explain how spectroscopy is intended to operate in the event that the manufacturer of the diagnostic station is different from the one of the MRi system?

Answer: Potential Bidder should take care that offered system (Diagnostic workstation in client- server architecture) and requested functionalities and software options 1.1-1.38 (where MR Spectroscopy evaluation is requested under point 1.31) should serve all related modalities requested in this Lot. It means that offered Spectroscopy evaluation functionality on diagnostic workstation should enable postprocessing of these studies without any restrictions on offered MR system (Item 1) within this Lot. That is the reason why it is of crucial importance that  item no. 3- diagnostic workstation, should be in the same lot with other requested modalities, in order to secure proper functionality for whole department of all medical devices requested in this lot.

32. Your tender documents for Lot 2, ID 3, item 1.31 request the following: LCD high resolution monitor min. 2MP and diagonal size min.  24“, 2 pcs. for each client, 20 pcs. Taking into account the standards according to which medical studies need to be diagnosed via medical-grade diagnostic monitors with sufficient gray scale display in order to diagnose DR and XA images, please confirm whether the monitors offered also need to be diagnostic - medical-grade monitors? "

Answer: Each producer of workstation has recommendation for monitor in order to provide the best image quality and optimal system functionality. Such monitors should be approved for use with requested diagnostic workstation in client-server architecture. Due to fact that monitors will be used for review the studies from medical devices (e.g. MR, CT), they should be medical-grade monitors.

LOT 1

Line item No. 3 MRI Scanner for radiotherapy planning

1.     Point 1.3. – requested:

Guaranteed homogeneity values of magnetic field in accordance with V.R.M.S. method:

- DSV, for spheric volume with diameter of 10 cm: not bigger then 0,01 ppm

- DSV, for spheric volume with diameter of 40 cm: not bigger then 1 ppm

**Question:** The requested parameters is related with empty magnet homogeneity after system installation and performing magnet shimming. This is ideal situation, but once the patient is positioned in the bore magnet homogeneity will be strongly affected. This effect can result in several ppm of field inhomogeneity, which means that homogeneity of magnet of 0.01ppm could be affected and increased above 2ppm. To fix that, we need patient specific shimming which will adjust the magnet homogeneity and adopt to regular values which enable all applications. Many applications and sequences (Spectral fat saturation and water excitation, all sequences that are sensitive to susceptibility effects, diffusion, perfusion, spectroscopy) are especially sensitive to magnetic-field inhomogeneities – and benefit most from patient-specific shimming. It means it does not matter whether empty magnet has homogeneity of 0,01 ppm or e.g. 0.02ppm if it is strongly affected after patient positioning for scanning and homogeneity is dramatically increased and needs additional shimming to be on clinically acceptable level. Hence, in many applications, the effect of the patient-specific shimming will be much more important than the homogeneity of the empty magnet. Considering that, is it acceptable for Purchaser to slightly change this request  as follows:

Guaranteed homogeneity values of magnetic field in accordance with V.R.M.S. method:

- DSV, for spheric volume with diameter of 10 cm: not bigger then 0,02 ppm

- DSV, for spheric volume with diameter of 40 cm: not bigger then 1 ppm

 Answer: Yes, it is acceptable.

Technical requirement 1.3 is changed as follows:

Guaranteed homogeneity values of magnetic field in accordance with V.R.M.S. method:

- DSV, for spheric volume with diameter of 10 cm: not bigger then 0,02 ppm

- DSV, for spheric volume with diameter of 40 cm: not bigger then 1 ppm

2.           Point 1.5 requested: Field Of View (FOV)– not less then 50 cm in each direction X,Y,Z

Question: We are aware that for bigger and obese patients FoV in X and Y direction is important. Field of view of 45 cm along z direction is completely sufficient to cover every single exam, single organ and body region scanning. There is no advantage of 50 cm coverage along z axis over 45 cm. Is it acceptable for Purchaser to change this request as follows:

Field Of View (FOV)– not less then 50 cm in direction X, Y and not less then 45 cm in Z direction

Answer: Change is not acceptable.

Coverage of 50cm enables bigger anatomy structures scanning as well as better usability of coil elements used during examination. Also, for scanning of longer anatomy at oncology patients (e.g. from head to pelvic) with FoV of 45 cm we would usually need one stage more which will unnecessarily prolong exam. Also, we would like to mention that all manufacturers have field of view of 50 cm in each direction on their latest generation 1.5T MR systems.

3.           Point 3.1 requested: Number of independent receiver channels that can be used simultaneously in one single scan and in one single FOV without patient table repositioning, each generating an independent partial image, minimum 32

Question: If you take a look on Technical specification of requested coils, no one coil has more than 24 coil elements. You can perform all exams with requested coils also with system who has 24 independent channels in one single FoV instead of 32 independent channels. Is it acceptable for Purchaser to change this request as follows:

Number of independent receiver channels that can be used simultaneously in one single scan and in one single FOV without patient table repositioning, each generating an independent partial image, minimum 24

Answer: Change is not acceptable.

This technical requirement is defined according to Customer objective clinical needs at the moment and also taking care about eventual future system upgradeability. With requested coils, 32 channels is necessary and sufficient to cover all applications and body region scanning with all coils without any restrictions. Having system with 24 independent channels would not allow customer to utilize capacity of anterior body coil which is usually combined with spine coil. Also, if once decide to purchase e.g. 32 channel head coil, which could be interesting in the future, 24 channels would be useless. Also, we would like to mention that all manufacturers have 32 channels in a single FoV on their latest generation 1.5T MR systems.

4.           Point 3.1 requested: Maximal scan range- not less than 200cm

Question: Looking at coil configuration you specified within technical specification there are no coils who can provide whole body scanning. Based on requested coils you can scan patient from head to pelvic where scan range of 140 cm is sufficient. Is it acceptable for Purchaser to change this request as follows:

Maximal scan range- not less than 140cm

Answer: Change is not acceptable.

Defining the Maximal scan range- not less than 200cm, customer would like to have the system capable to do whole body imaging. At the moment, we didn’t ask for e.g pheripheral angiography coil, but once we decided to purchase, scan range of 140 cm would not be sufficient. Whole body imaging is more and more worldwide recognized as standard exam for screening and we would like to secure that our system will be able to do that.

"5. Point 5.1 requested: Dockable table which enables easy patient preparation outside the examination room. Dockable table should have all coil connectors integrated on it, so complete patient preparation including coil positioning and connecting to the table could be done outside the examination room  
Question: Taking into consideration that within technical specification you asked also for Antimagnetic stretcher for patient transport on which you can easily transport the patient, enter the examination room, transfer the patient to the patient table and prepare patient for scanning, is it acceptable to offer fixed patient table with coil connectors which enable easy and fast patient and coil positioning, instead of dockable table which is very expensive solution. Is it acceptable for Purchaser to change this request as follows:  
  
Patient table which enables easy patient preparation and coil positioning

Answer: Change is not acceptable.

The purpose of dockable table is to position coils and patient outside the examination room for radiotheraphy planning. In situation when e.g. follow up scanning is required, antimagnetic stretcher will be used if necessary.

LOT 1

Line item No. 3 MRI Scanner for radiotherapy planning

QUESTION 1: Is it acceptable to the Contracting Authority to change the technical requirement 1.3 so now it states: “Guaranteed homogeneity values of magnetic field in accordance with V.R.M.S. method:

- DSV, for spheric volume with diameter of 10 cm: not bigger than 0,01 ppm

- DSV, for spheric volume with diameter of 40 cm: not bigger than 0.75ppm”?

EXPLANATION: Improvement on the homogeneity to the highest standards the market can offer 0.75ppm, all vendors can participate. The magnet homogeneity is one of the most important quality characteristics of an MRI system and exceptionally important in large FOV oncology and RT applications. All manufacturers offer systems with improved homogeneity performance in large FOVs (40cm DSV) than the requested while there are still systems offered that offer inferior homogeneity performance. We suggest that the VRMS homogeneity at 40cm DSV requirement is improved to not bigger than 0.75ppm.

Answer: Change is not acepptable.

If Potential Bidder would like to offer better performance then it is requested in minimal technical specification, such offer would be accepted.

QUESTION 2: Is it acceptable to the Contracting Authority to change the technical requirement 2.1 so now it states: “Gradient performance (Amax x SRmax)- minimum 8.000 mT²/m²/ms per axis, where Amax is the maximum gradient amplitude for each axes and SRmax is the highest value of slew rate for each axes)”?

EXPLANATION: The specified gradients with 4000 mT²/m²/ms per axis are low in specifications corresponding to an average of 33mT/m amplitude and 125mT/m slew rate. The gradients quality in a radiotherapy planning applications is of imperative importance. We suggest improving the gradient performance to Amax x SRmax > 8000 mT²/m²/ms.

Answer: Change is not acepptable.

Gradient performance parameter of the system is defined according to Customer objective clinical needs, specially taking into considerations the number of patients who will be scanned, their pathology and sequences and applications which will be used. On the market, among vendors, there are different combinations of maximum gradient amplitudes and slew rates (not only 33mT/m amplitude and 125mT/m slew rate). Hence, in order not to make discrimination among vendors on any of these two parameters, Customer decided to define gradient performance as multiplication of these two parameters, because, in combination, both of them are very important. If Potential Bidder would like to offer better performance then it is requested in minimal technical specification and offer the system who has gradient performance  > 8000 mT²/m²/ms , such offer would be accepted.

QUESTION 3: Is it acceptable to the Contracting Authority to change the technical requirement 3.1 so now it states: “Number of independent receiver channels that can be used simultaneously in one single scan and in one single FOV without patient table repositioning, each generating an independent partial image, minimum 64”?

EXPLANATION: The requested performance is outdated. Current systems can offer up to 128 independent channels which improves the imaging capabilities and the longevity of the system as new coil technologies emerge that enable the use of coils that can offer more than 32 channels in a single imaging FOV. We suggest that the specification is improved to a minimum of 64 independent receiver channels in one single scan and in one single FOV.

Answer: Change is not acepptable.

This technical requirement is defined according to Customer objective clinical needs at the moment and also taking care about eventual future system upgradeability and longevity of the system. With requested coils, 32 channels is completely sufficient to cover all applications and body region scanning with all requested coils without any restricitions. If Customer once decided to purchase e.g. 32 channel head coil, which could be interesting in the future, 32 channels in a single FoV would be also sufficient. If Potential Bidder would like to offer system with more then 32 channels that can be used simultaneously in one single scan and in one single FOV, such offer would be accepted as well.

QUESTION 4: Is it acceptable to the Contracting Authority to change the technical requirement 4.4 so now it states: “Spine coil with minimum 32 coil elements”?

EXPLANATION: All current MRI systems of this segment can provide at least 32 elements for the spine. Requesting for 24 elements allows for selected lower end systems to participate distorting competition and downgrading the performance of the system and its clinical output. It should be considered that according to 4.2 the anterior coil which is combined with the spine coil for body imaging is requested with 24 elements in a 60cm scan range. The spine coils cover on average 120cm. Requesting the same number of elements in a 60cm and a 120cm scan range over the same anatomy will result in suboptimal to the current standards in imaging. We suggest increasing the minimum number of elements to 32.

Answer: Change is not acepptable.

This technical requirement is defined according to Customer objective clinical needs, also taking care about minimum requested independent channels within single FoV and coils combination during scanning.  Having that on mind, and the fact that a lot of examinations would be abdominal body imaging, where spine coil would be combined with anterior body coil (s), one can conclude that spine coil of 32 elements would be useless, which means either you will not utilize all elements from anterior body coil (s), either you will not utilize all available elements from spine coil within one single FoV.  If Potential Bidder would like to offer system spine coil with more then 32 elements, such offer would be accepted.

QUESTION 5: Is it acceptable to the Contracting Authority to change the technical requirement 6.2 so now it states: ““Two (2) Color LCD monitors with resolution not less than 1.3MP with diagonal size not less than 19“ or one (1) color LCD monitor with diagonal size not less than 24.1“ with 1920x1200 resolution”?”?

EXPLANATION: GE offers one 24.1inch screen with 1920x1200 resolution with all MR systems. The request for two screens does not offer any additional functionality and limits competition not allowing GE healthcare to participate in this tender. We request that both options are accepted.

Answer: Yes, it is acepptable.

Technical requirement 6.2 is changed as follows:

“Two (2) Color LCD monitors with resolution not less than 1.3MP with diagonal size not less than 19“ or one (1) color LCD monitor with diagonal size not less than 24“ with 1920x1200 resolution”

QUESTION 6: Is it acceptable to the Contracting Authority to remove the technical requirement 7.6 that states: “High resolution diffusion- RESOLVE, FOCUS or equivalent”?

EXPLANATION: Resolve and FOCUS are not equivalent techniques. FOCUS offers a 2D selective excitation offering restricted FOV imaging without aliasing artifacts and distortion without time penalties due to over scan needs. Siemens' equivalent technique is Zoomit. We are aware that Siemens does not offer Zoomit technique in 1.5T systems so we request that specification 7.6 is removed.

Answer: Change is not acepptable.

Customer defined high resolution diffusion option as mandatory technical feature. This feature is of great importance for system clinical use. According to some prostate imaging guidance for high resolution diffusion imaging it is recommended RESOLVE or FOCUS sequences. Customer does not want to go inside each vendor technology and the principles of their solution. Both above mentioned options provide at least high resolution diffusion imaging. However Customer allows Potential Bidder to offer equivalent technique which would enable high resolution diffusion imaging.

QUESTION 7: We would like to kindly ask the Contracting Authority to explain the need for the technical requirement 8.5 that states: “Antimagnetic stretcher for patient transport” when you are also requesting a detachable table?

Answer: The purpose of dockable table is to position coils and patient outside the examination room for radiotheraphy planning. In situation when e.g. follow up scanning is required, antimagnetic stretcher will be used if necessary.

LOT 1

Line item No. 4 Diagnostic workstations in client – server architecture, with server and 4 clients computer, with 2D, 3D basic and advanced visualization applications from different modalities MR, CT, X-ray system, ultrasound

QUESTION 1: We would like to kindly ask the Contracting Authority to clarify further what your refer to as phase splitting in the technical requirement 1.12 “Direct4D for creation of tMIP, tminIP, AverageCT, phase splitting, 4D contouring, tumor motion analysis, semi-automatic generation of ITV / Mid Ventilation phase”?

Answer: Phase splitting is related with 4D CT imaging for radiotheraphy planning. During 4D CT, multiple phases of respiration are imaged. This option should provide ability to choose different phase of imaging (breathing cycles) and identify the patient specific phase of minimum tumor motion.

LOT 2

Questions for Line item No.1 Open bore 3T MRI Scanner

 QUESTION 1: Is it acceptable to the Contracting Authority to change the technical requirement 2.1. so now it states: “Gradient performance (Amax x SRmax)- minimum 5.400 mT²/m²/ms per axis, where Amax is the maximum gradient amplitude for each axis and SRmax is the highest value of slew rate for each axis)”?

EXPLANATION: GE Healthcare offers the novel technology Ultra High Efficiency gradient system. This gradient system offers a high imaging performance equivalent to conventional technology gradient systems of Amax x SRmax = 9.000mT²/m²/ms per axis as stated in the original manufacturer's product data sheet of the system, while the nominal value is 5.400mT²/m²/ms. The additional benefit of this technology is its radically decreased energy consumption and the lower overall system's cooling requirements. We request that the minimum value for Amax x SRmax is reduced to 5.400 mT²/m²/ms per axis to allow us to offer the benefits of novel technologies.

Answer: Change is not acceptable.

Gradient performance parameter of the system is defined according to Customer objective clinical needs, specially taking into consideration the number of patients who will be scanned, their pathology and sequences and applications (diffusion, perfusion, spectroscopy, high resolution diffusion imaging, dynamic body imaging, ultra fast sequences- GRE, EPI, etc.) which will be used. We are aware that there are 3T systems on the market with gradient performance from 5.400mT²/m²/ms to over 15.000mT²/m²/ms for research purpose. We are also aware that you as potential bidder as well as other vendors can offer the latest generation systems with gradient performance higher then requested minimum of 7.000mT²/m²/ms who will also meet our clinical needs. If Potential Bidder would like to offer better performance then it is requested in minimal technical specification and offer the system who has gradient performance  > 7000 mT²/m²/ms, such offer would be accepted.

QUESTION 2: Is it acceptable to the Contracting Authority to change the technical requirement 2.2 so now it states: “Maximum power of gradient amplifier, min. 0.686 MW”?

EXPLANATION: In combination with our amendment request in specification 2.1 we request that the maximum power of the gradient amplifier to be reduced to 686KW (or 0.686MW). GE Healthcare's novel Ultra High Efficiency gradient technology sets the paradigm in energy efficiency and offers a radically reduced power demand which is reflected to the nominal maximum power of the gradient amplifier. We request to amend the maximum power of gradient amplifier from min. 1.6MW to min 0.686MW to allow us to offer the benefits of novel technologies.

Answer: Change is not acceptable.

Gradient amplifier power defined under 2.2 directly relates with gradient performance defined under 2.1. Gradient amplifier represents the “engine” of the gradient system. A High power amplifier is required to achieve and maximally utilize gradient performance (amplitude and slew rate) without any compromise. We are also aware that you as potential bidder as well as other vendors can offer the latest generation 3T systems with power of gradient amplifier higher then requested 1.6 MW.

 QUESTION 3: Is it acceptable to the Contracting Authority to change the technical requirement 3.1 so now it states: “Number of independent receiver channels that can be used simultaneously in one single scan and in one single FOV without patient table repositioning, each generating an independent partial image, minimum 64”?

EXPLANATION: The requested performance is outdated. Current systems can offer up to 128 independent channels which improves the imaging capabilities and the longevity of the system as new coil technologies emerge that enable the use of coils that can offer more than 32 channels in a single imaging FOV. We suggest that the specification is improved to a minimum of 64 independent receiver channels in one single scan and in one single FOV.

Answer: Change is not acepptable.

This technical requirement is defined according to Customer objective clinical needs at the moment and also taking care about eventual future system upgradeability. With requested coils, 32 channels is completely sufficient to cover all applications and body region scanning with all requested coils without any restricitions. If customer once decided to purchase e.g. 32 channel head coil, which could be interesting for us in the future, 32 channels in a single FoV would be also sufficient. If Potential Bidder would like to offer system with more then 32 channels that can be used simultaneously in one single scan and in one single FOV, such offer would be accepted as well.

QUESTION 4: Is it acceptable to the Contracting Authority to change the technical requirement 3.2 so now it states: “Number of physical coil elements that can be simultaneously connected during one exam, minimum 96”?

EXPLANATION: Ability to connect 146 coil elements on the system does not add anything to its functionality. According to the requested coils in specifications 4.2 to 4.9 the maximum number of elements that could be connected on the system on a valid clinical scenario would be 30 from the anterior body coil or coils, 19 from head and neck coil and 24 from the spine coil, giving a total of 73. The remaining 73 out of the total 146n requested will not add any functionality. The specification promotes the RF architecture of Siemens without adding any clinically relevant benefit. We suggest that the number of physical coil elements that can be simultaneously connected during one exam is a minimum of 96. This exceeds the actual demand from the specified coils but corresponds to our suggestions for improvement in their specifications.

Answer: Request is partially acceptable.

The main reason to have possibility to connect many coil elements simultaneously is patient comfort and shorter exam time (not necessary to reposition coils during exam). Also, this technical requirement is defined according to Customer objective clinical needs at the moment and also taking care about eventual future system upgradeability. Related with this, we would also like to mention that under point 5.1, it is defined “Maximal scan range- not less than 200cm”, which means that system should be able to support whole body imaging. It makes us opportunity for the future to purchase (if it would be clinically necessary- pheripheral angiography coil) and easily perform whole body imaging without patient nor coils repositioning. It means if we would have e.g Head coil 32 elements, Body coil 30 elements, Spine 24 elements and PA coil which usually has minimum 36 elements among vendors who can offer that coil, connecting them together brings us to 122 simultaneously connected elements. Hence, request 3.2 is changed as follows: “Number of physical coil elements that can be simultaneously connected during one exam, minimum 122”

However there are vendors who can offer several 3T latest generation systems who can meet minimum of 122 simultaneously connected coil elements during one exam as well as 146 and even higher.

QUESTION 5: Is it acceptable to the Contracting Authority to change the technical requirement 4.4 so now it states: “Spine coil with minimum 32 coil elements”?

EXPLANATION: All current high end 3.0T MR systems can offer a minimum of 32 elements for the spine coil. To allow the system to be in current standards of imaging performance we suggest that the specification of the elements of the spine coil to be increased to 32.

Answer: Change is not acceptable.

This technical requirement is defined according to Customer objective clinical needs, also taking care about minimum requested independent channels within single FoV and coils combination during scanning.  Having that on mind, and the fact that a lot of examinations would be body imaging, where spine coil would be combined with anterior body coil (s), one can conclude that spine coil of 32 elements would be useless, which means either you will not utilize all elements from anterior body coil (s), either you will not utilize all available elements from spine coil within one single FoV.  However, if Potential Bidder would like to offer system spine coil with 32 elements, such offer would be accepted.

LOT 2

Questions for Line item No.1 Open bore 3T MRI Scanner

QUESTION 6: Is it acceptable to the Contracting Authority to change the technical requirement 4.7 so now it states: “Separate, dedicated multi-channel coil for the imaging of shoulder, with minimum of 16 coil elements, flex coil is also acceptable”? EXPLANATION: The shoulder anatomy is generally one of the most difficult to image. Various pathologies require anatomy orientations that cannot be obtained with rigid imaging coils (Aber). Flexible coil technology with the requested number of channels not only allows all anatomy orientations but conforms better to the anatomy and enhances both patient's comfort and radiographer's workflow. On top we can offer two different sizes of coils that will allow imaging of various shoulder sizes with the same excellent image quality.

Answer: Change is not acceptable.

Dedicated, rigid coils are always better for joints positioning and scanning. Due to anatomical shape, they can be positioned very close to the joint (in this case shoulder) making higher SNR and better image quality. Generally, flex coils can be used also but as alternative solution. However, two flex coils, different sizes are requested under point 4.5. for imaging of smaller joints and has to be offered. Almost all vendor can offer the latest generation 3T systems with dedicated (rigid) coil for shoulder.

QUESTION 7: Is it acceptable to the Contracting Authority to change the technical requirement 4.8 so now it states: “Separate, dedicated multi-channel coil for the high-resolution imaging and spectroscopy examinations of breast, with minimum of 8 coil elements.”? EXPLANATION: The combination of specification 4.8 and 4.9 offers a suboptimal result. All manufacturers can offer 8 or 16 elements breast coils with biopsy capabilities. The image resolution required in the biopsy procedure is not less than what is requested for diagnosis. Offering two separate coils with such difference in specifications and capabilities will limit the performance of the system in this sensitive clinical area. We suggest that the elements specification for the breast coil to be upgraded to minimum 8 for both diagnostic and biopsy procedures.

Answer: Change is not acceptable.

Customer definitely needs two separated coils, one for diagnostic and one for biopsy procedures. Coil with higher number of elements is especially important for diagnostic purpose (Diffusion imaging, dynamic studies, spectroscopy, etc.) due to resolution as well as shorter exam times. On the other hand customer already use in practice breast coil for biopsy procedures with 4 elements and is fully satisfied. All vendors can offer the latest generation 3T systems who can meet requirements under point 4.8 and 4.9.

QUESTION 8: Is it acceptable to the Contracting Authority to change the technical requirement 4.9 so now it states: “Separate, dedicated multi-channel coil only for breast biopsy procedures, with minimum of 8 coil elements”? EXPLANATION: The combination of specification 4.8 and 4.9 offers a suboptimal result. All manufacturers can offer 8 or 16 elements breast coils with biopsy capabilities. The image resolution required in the biopsy procedure is no less than what is requested for diagnosis. Requesting two separate coils with such difference in specifications and capabilities will limit the performance of the system in this sensitive clinical area. We suggest that the elements specification for the breast coil to be upgraded to minimum 8 for both diagnostic and biopsy procedures.

Answer: Change is not acceptable.

Customer definitely needs two separated coils, one for diagnostic and one for biopsy procedures. Coil with higher number of elements is especially important for diagnostic purpose (Diffusion imaging, dynamic studies, spectroscopy, etc.) due to resolution as well as shorter exam times. On the other hand customer already use in practice breast coil for biopsy procedures with 4 elements and is fully satisfied. All vendors can offer the latest generation 3T systems who can meet requirements under point 4.8 and 4.9.

QUESTION 9: Is it acceptable to the Contracting Authority to change the technical requirement 5.1 so now it states: “Maximal scan range- not less than 181 cm”? EXPLANATION: We offer 181cm which covers all relevant applications. The request for 200cm will limit competition without offering any clinical advantage.

Answer: Yes, it is acceptable.

The main purpose of such request is the whole body imaging which should be available on the system and would enable whole body scanning with existing coils as well as with future purchased coils (e.g. peripheral angiography coil). If the offered system can meet above mentioned functionalities, it is acceptable for customer maximal scan range not less than 181 cm. Technical requirement 5.1 is changed as follows:

“Maximal scan range- not less than 181 cm”

QUESTION 10: Is it acceptable to the Contracting Authority to change the technical requirement 5.3 so now it states: “Existence of volume control either in room or on the system console”? EXPLANATION: The use of the communication system is done when the patient and the radiographer are not in the same room where they can just talk to each other. The need to adjust the volume is when the radiographer is on the console; this is the correct position of the volume control. We request that specification is amended to request the existence of volume control either in room or on the system console.

Answer: Request is partially acceptable.

Technical requirement 5.3 is changed as follows: “Existence of volume control either in room or on the system console and bidirectional voice communication”

QUESTION 11: Is it acceptable to the Contracting Authority to change the technical requirement 6.2 so now it states: “Two (2) Color LCD monitors with resolution not less than 1.3MP with diagonal size not less than 19“ or one (1) color LCD monitor with diagonal size not less than 24.1“ with 1920x1200 resolution”? EXPLANATION: GE offers one (1) 24.1inch screen with 1920x1200 resolution with all MR systems. The request for two screens does not offer any additional functionality and limits competition not allowing GE Healthcare to participate in this tender.

Answer: Yes, it is acepptable. Technical requirement 6.2 is changed as follows:

“Two (2) Color LCD monitors with resolution not less than 1.3MP with diagonal size not less than 19“ or one (1) color LCD monitor with diagonal size not less than 24“ with 1920x1200 resolution”

QUESTION 12: Is it acceptable to the Contracting Authority to change the technical requirement 7.8 so now it states: “High resolution diffusion - Zoomit, FOCUS or equivalent”?

EXPLANATION: Resolve and FOCUS are not equivalent techniques. FOCUS offers a 2D selective excitation offering restricted FOV imaging without aliasing artifacts and distortion without time penalties due to over scan needs. Siemens' equivalent technique is Zoomit.

Answer: Change is not acceptable.

Customer defined high resolution diffusion option as mandatory technical feature. This feature is of great importance for system clinical use. According to some prostate imaging guidance for high resolution diffusion imaging it is recommended RESOLVE or FOCUS sequences. Customer does not want to go inside each vendor technology and the principles of their solution. Both above mentioned options provide at least high resolution diffusion imaging. However Customer allows Potential Bidder to offer equivalent technique which would enable high resolution diffusion imaging.a