



No: AIIMS/R/CS/URO/2022/158/ST

Date: 09.08.2023

**Call for Objection**

**Subject:** Inviting comments/objection, if any before declaring proprietary article for procurement of "Virtual Reality Urology Surgical Simulator" for Urology at AIIMS, Raipur.

Urology Department at AIIMS, Raipur has to procure Virtual Reality Urology Surgical Simulator through Proprietary Article basis.

The proposal submitted by M/s VirtaMed AG, Switzerland who is sole manufactures and M/s Hospimedica International, Delhi is the Local Agent of this item along with Proprietary Article Certificate are attached & uploaded on CPP Portal & Institute website.

The above documents are being uploaded for open information to submit objections, comments if any from any manufacturer/supplier before declaring proprietary article of the said equipment/items to be procured, within 10 days (i.e. 19.08.2023) from the date of issuance/uploading of the notification.

The objection should be raised in the technical compliance sheet as enclosed, if any firm claiming suitability of their product with respect to specification mentioned.

The comments should be sent to the office of Central Store Office on above address at AIIMS Raipur in a sealed envelope with above reference on sent to respective mail address [storesofficer.cp@aiimsraipur.edu.in](mailto:storesofficer.cp@aiimsraipur.edu.in) on before 19.08.2023 up to 05:00PM from the date of uploading on institutional website, failing which it will be presumed that any other manufacture/vendor is having no comment to offer and case will be decided on merits.



**Stores Officer  
AIIMS Raipur (CG)**

**महानिदेशक अधिकारी (के.क.)**

**Stores Officer (CP)**

**एम्. रायपुर (छ.ग.)**

**AIIMS Raipur (C.G.)**

**Enclosure:-**

1. PAC Certificate by Manufacturer.
2. PAC Certificate by Department.
3. Technical Specification.

**Technical Specifications of Virtual Reality Urology Surgical Simulator (Qty. 01):**

**Technical Specifications Compliance report**

Sr. No.	Required Specification	Specification Offer by Firm	Deviation (if any)	Remark
1	<p>1. The Virtual Reality Urology Surgical Simulator should have Training Programme for TURP, TURBT and Laser BPH modules.</p> <p>2. The system should have interdisciplinary interchangeable platform (e.g. Arthroscopy, Gynecology, Urology &amp; Laparoscopy) - same platform can be used to train - Arthroscopy, Gynecology, Urology &amp; Laparoscopy by adding various surgical modules in future.</p> <p>3. Urology Simulator should be fully upgradable to Laparoscopy Training for General Laparoscopic Surgery Module, Essential Laparoscopy Skills Module and Gynaecological Laparoscopy Module.</p> <p><b>1. General Features Urology</b></p> <p>1.1. It should be a virtual reality simulator specifically designed to train diagnostic and surgical endoscopic transurethral procedures:</p> <ul style="list-style-type: none"> <li>- It must be designed to train basic skills for endoscopic transurethral procedures</li> <li>- It must be designed to train diagnostic and therapeutic endoscopic procedures in the bladder, especially removal of bladder tumors (TURB)</li> <li>- It must be designed to train diagnostic and therapeutic endoscopic procedures for the prostate, especially treatment of benign prostatic hyperplasia (TURP)</li> <li>- It must be designed to train different treatment options for benign prostatic hyperplasia               <ul style="list-style-type: none"> <li>o Electro surgery</li> <li>o Laser surgery                   <ul style="list-style-type: none"> <li>▪ Enucleation</li> <li>▪ Vapor section</li> <li>▪ Vaporization</li> </ul> </li> </ul> </li> <li>- Should Contain healthy anatomies as well as various pathologies</li> </ul> <p>1.2. The training simulator should be based on a platform which is designed to:</p> <ul style="list-style-type: none"> <li>- Support a haptic interface to provide most realistic haptic feedback for the interventions</li> <li>- Should be extendable to further disciplines such as Arthroscopy and Hysteroscopy training</li> <li>- Should change from one modality to the next within less than 5 minutes</li> </ul> <p>1.3. The urology training simulator should be based on haptic feedback provided by a high-fidelity haptic interface in combination with real surgical tools.</p> <p>1.4. A highly realistic high-fidelity virtual reality image</p>			

stream must be provided containing all relevant anatomical structures, pathologies, complications, and simulation of fluid management.

**2. System platform requirements**

- 2.1. A transport case should be provided for the simulator.
- 2.2. System should contain a high-end PC with:
  - Minimum 3.5 GHz CPU
  - Minimum 1TB HD
  - High performance graphics card
- 2.3. The system should have high end PC with at least 27-inch adjustable multi – touch screen

**3. Urology Simulator must have following features:-**

- 3.1. The urology training simulator should be based on a high-fidelity haptic interface designed to provide most realistic haptic feedback to the surgical instruments during the procedure.
- 3.2. The haptic interface must be compatible to the resectoscope.
- 3.3. No calibration by the user should be required (even after restart of the system).

**4. Tool's specifications – Urology**

- 4.1. Original surgical instruments should be used which are adopted for simulation training maintaining feel and functionality.
- 4.2. Open / close state of the valves on the resectoscope should be tracked.
- 4.3. The resectoscope camera should support 0 deg, 12 deg and 30 deg optics.

**5. General software specification – Urology**

- 5.1. It should visually mimic a real procedure as closely as possible including features such as liquid flow, acoustics, tactile feedback, blood loss, tissue interaction etc.
- 5.2. Acoustic feedback must include operating room background sounds and sounds of tools during operation.
- 5.3. It should contain predefined didactic courses for users with different experience levels.
- 5.4. It should contain the possibility to design own courses with own scoring based on all patient cases available in the simulator.
- 5.5. It should include fluid handling via the valves on the resectoscope into the simulation: The fluid simulation should react to open / close state of the valves on the scope.
- 5.6. It should contain complications such as bad view and bleeding. Trainees can learn how to deal with such complications.
- 5.7. It should display outside view of the anatomical structure and the tools:
  - Outside view must be customizable by the user by selecting different view planes
  - Outside view optionally must show the correct tool positions as a didactic aid

- 5.8. It should provide a step-by-step task list to guide the user through the procedures.
- 5.9. It should contain and stores feedback reports after each procedure including the videos.
- 5.10. It should generate printable feedback reports.
- 5.11. It should handle various users and store videos of the performances for each user with easy access for the administrator. Administrator can view and export all the user information for a single case.

**6. Urology training simulator software specifications**

- 6.1. It must contain at least 8 basic skills training cases covering visualization, bleeding control, resection and partial TURP
  - 6.2. It should contain at least 8 TURP full procedure cases
  - 6.3. It should contain at least 4 TURB full procedure cases
  - 6.4. It should contain at least 2 abstract cases to train the basics of laser enucleation, vaporization and vaporesction of the prostate.
  - 6.5. It should contain at least 8 cases for laser BPH (benign prostatic hyperplasia) treatment (laser enucleation, vaporization, vaporesction).
  - 6.6. It should contain didactic training for all the relevant procedures.
15. Simulator should be supplied with 5 years warranty and CMC rates should be quoted for next five years.
  16. Manufacturer or Bidder should have imported/supplied at least one Urology Simulator in India.
  17. Onsite training for Faculty/residents/staff should be provided by bidder.
  18. Manufacturer & Bidder both should have ISO certifications for proper maintenance of equipment.

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अखिल भारतीय आयुर्विज्ञान संस्थान, रायपुर (छ.ग.)  
All India Institute of Medical Sciences, Raipur (Chhattisgarh)  
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Raipur-492 099 (CG)  
[www.aiimsraipur.edu.in](http://www.aiimsraipur.edu.in)

स्वामित्व प्रमाण पत्र  
Proprietary Article Certificate

फाइल संख्या और संदर्भ File Number and Reference		NO. Urology/2022/OW/158, Date: 16-08-2022
1	सामाग्री का विवरण Description of article	Virtual Reality Urology Surgical Simulator
2	पूर्वानुमानित मात्रा / वार्षिक आवश्यकता Forecast of quantity/annual requirement	ONE SET
3	उपरोक्त मात्रा हेतु अनुमानित मूल्य Approximate estimated value for above	Rs. [REDACTED] /—
4	निर्माता का नाम एवं पता Maker's name and address	MIS. VITAMMED AG, Zurich, Switzerland
5	अधिकृत डीलर / स्टॉकिस्ट का नाम Name(s) of authorised dealers/stockists	Hospimedica International Ltd., New Delhi - 110018
6	<p>मैं पी ए सी के आधार पर उपरोक्त खरीद को स्वीकार करता हूँ और यह प्रमाणित करता हूँ कि:</p> <p>नोट- (बी), (सी-1) या (सी-2) में से केवल एक को बनाए रखने के लिए टिक करें, जो भी लागू हो और दूसरो को काट दें। कृपया (ए) टिक कर पुष्टि करें इसके बिना पीएसी प्रमाण पत्र अवैध होगा</p> <p>I approve the above purchase on PAC basis and certify that:- Note- Tick to retain only one out of (b), (c-1) or (c-2) whichever is applicable and cross out others. Please do confirm (a) by ticking it – without which PAC certificate will be invalid.</p>	
6 (a)	यह एकमात्र फर्म है जो इस मद का निर्माण/संग्रहण कर रहा है। और This is the only firm who is manufacturing /stocking this item. AND	<input checked="" type="checkbox"/>
6 (b)	किसी अन्य फर्म द्वारा समरूप मद निर्मित/विक्रय नहीं किया जाता है, जिसका उपयोग इसके बदले किया जा सकता है। अथवा A similar article in not manufacturing/sold by any other firm, which could be used in lieu OR	<input checked="" type="checkbox"/>
6 (c-1)	कोई अन्य मेक/ब्रांड निम्नलिखित कारणों ( जैसे ओईएम/वारंटी के) के लिए उपयुक्त नहीं होगा। अथवा No other make/brand will be suitable for following tangible reasons (like OEM/warranty spares): OR	
6 (c)	कोई अन्य मेक/ब्रांड निम्नलिखित कारणों से उपयुक्त नहीं होगा (अगर पीएसी	

	<p>पिछले खरीद में भी दिया गया था, तो कृपया इसके बाद से अधिक स्रोतों का पता लगाने के लिए प्रयास करें) तथा          No other make/brand will be suitable for following intangible reasons (if PAC was also given in the last procurement cycle, please also bring out efforts made since then to locate more sources): OR</p>	
7	<p>प्रस्ताव के लिए वित्त शाखा की सहमति का संदर्भ (कार्रवाई भंडार और लेखा विभाग द्वारा की जायेगी)          Reference of concurrence of finance wing to the proposal (Action will be taken by stores &amp; Account Department)</p>	

पिछले तीन सालों में इस मद की पीएसी खरीद का इतिहास नीचे दिया जा सकता है (यदि कोई हो) History of PAC purchase of this item for past three years may be given below (if any)

प्रदायक का नाम Name of the Supplier	आदेशित मात्रा Quantity Ordered	आदेश पर मूल दर (₹) Basic Rate on order (Rs.)	प्रतिकूल प्रदर्शन रिपोर्ट अगर कोई हो Adverse Performance Reported if any
आदेश/निविदा संदर्भ और दिनांक Order/Tender reference & Date			

अनुमोदन करने वाले प्राधिकारी का हस्ताक्षर ----- *[Signature]*

(DR. D. K. BISWAL)

दिनांक 16-08-2022

अधिकारी का पदनाम *Asst. Prof.*  
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August 22<sup>nd</sup>, 2022

**Letter of Authorization**

To,

**The Director**

**All India Institute of Medical Sciences**

**Raipur, Chhattisgarh**

**VirtaMed AG**, a company duly incorporated under the laws of Switzerland and with its registered offices at **Rütistrasse 12, CH-8952 Schlieren, VAT no. CHE113.865.145**, is the developer, designer, and sole manufacturer of VirtaMed Virtual Reality Simulators for medical training of procedures in the field of Urology, Orthopedics, Laparoscopy, Obstetrics and Gynecology and Reproductive Medicine.

**VirtaMed** hereby confirms that the company **Hospimedica International Ltd., Leelawanti House, 58/10, Ashok Nagar, New Delhi 110018, India** is our Exclusive Authorized Distributor for your Hospital to provide the following facility: -

- i) Quote, Negotiate and Conclude the subject bid/offer on our behalf.
- ii) Installation and Demonstration of the equipment.
- iii) Provide after sales service, during and after the warranty period.
- iv) Supply of equipment's, spare parts, accessories, and consumables

VirtaMed confirms that the VirtaMed UroS™ is proprietary products of VirtaMed AG, Switzerland and no other company, other than M/s VirtaMed manufacturers this product in the world.

We also certify that **M/s Hospimedica International Ltd., having regd. office at Leelawanti House, 58/10, Ashok Nagar, New Delhi-110018 (India)** are fully trained for carrying out installation, commissioning and servicing all range of products.

This letter of authorization is valid till March 31st, 2024. We certify that in case of change of agency we shall inform the user about the change and make necessary arrangements for after sales services.

On behalf of VirtaMed,



Samar Nath Bose  
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Schlieren, Dec 16<sup>th</sup>, 2021

### Proprietary Equipment Certificate

To whom it may concern

VirtaMed AG, a company duly incorporated under the laws of Switzerland, with its registered offices at Rütistrasse 12, CH-8952 Schlieren, Canton of Zurich, Switzerland, hereby certifies that the VirtaMed UroS™ virtual reality simulator for Urology Training is a proprietary equipment of VirtaMed AG. The VirtaMed UroS™ is manufactured exclusively by VirtaMed AG in its facilities located at its registered offices.

The following features and contents are available on the VirtaMed UroS™ simulator:

- Universal platform supporting all modules of VirtaMed's Orthopaedics, Gynaecology and Laparoscopy virtual reality simulator ranges, allowing multi-disciplinary set-ups.
- Switching between different surgical modules is possible in less than five minutes
- Real surgical tools adapted for simulation are used, maintaining feel and functionality
- The urology training simulator is based on haptic feedback provided by a high-fidelity haptic interface in combination with real surgical tools.
- The simulator visually mimics a real procedure as closely as possible including features such as liquid flow, acoustics, tactile feedback, blood loss, tissue interaction etc.
- Feedback reports with video recording of all procedures and images allow for immediate debriefing after each patient case. Reports identify learning opportunities and track learning progress over time.

The product design and specifications of the VirtaMed UroS™ are the property of and controlled by VirtaMed AG.

On behalf of VirtaMed,



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