Corrigendum for Tender for Veterinary Machinery and Equipment, No. VET/Tender/469/570/2015/AH-12, Aundh, Pune-07. Dated 5/5/2015

1. Tender Terms and conditions number 8 (a) iii should be read as follows
   "Last years (2013-14) annual financial statement of bidding firm issued by CA."
2. Revised Annexure-A should be read as follows

Item No	Item name & specifications	Revised Specifications: Annexure-A
VE-1	Technical Specifications of DIGITAL FROZEN SEMEN THAWING SYSTEM (With Battery Backup) A. Facility: Programmable heating cycle from 4 minutes to 6 minutes PID control action for accurate temp. Control. Built-in Vibrator for uniform distribution of Semen. SMS facility GPS Tracking Audio Indication (Buzzer) while Unit ON/OFF and Thawing cycle Completion. Device application to have facility to sync with mobile application (android based) and should transmit AI details to web server application Facility for thawing data storage for one year. USB Port – 1 nos B. Operating Temperature: + 5 Deg. C to 50 Deg. C C. Accuracy: +/- 0.01 Deg. C D. Temp. Sensor: PT100 or equivalent E. Power Supply: 12V/5A Adaptor. Also should operate on motor cycle battery F. Battery: Rechargeable Lithium-ION battery pack. (Minimum 10 Thawing cycle battery backup) G. Weight: 1 kg (approx.) H. Enclosure Body: ABS body with Aluminum tube for Straw (shock proof) I. Indicator: Seven Segment Display: Temperature & Set point Indication, unit fault. LED: Supply ON, Heater ON, Battery Low	Technical Specifications of DIGITAL FROZEN SEMEN THAWING SYSTEM (With Battery Backup) A. Facility: Programmable or automatic heating cycle up to 6 minutes PID control action for accurate temperature Control. Built-in Vibrator for uniform distribution of Semen. SMS facility (It should contain farmers name, date of AI, animal ear tag or identification no etc.) GPS Tracking facility with proper tracking software Audio/visual Indication (Buzzer/LED indication) while Unit ON/OFF and Thawing cycle Completion. Device application to have facility to sync with mobile application (android based) and should transmit AI details to web server application Facility for thawing data storage for one year. USB Port – 1 nos. B. Operating Temperature: + 5 Deg. C to 50 Deg. C at ambient temperature. C. Accuracy: +/- 0.01 Deg. C D. Temp. Sensor: PT100 or equivalent E. Power Supply: A suitable adaptor shall be provided along with the thawing unit .The thawing unit should also operate on motor cycle battery. F. Battery: Rechargeable Lithium-ION battery of adequate capacity having minimum 10 thawing cycle battery backup. G. Total Weight of thawing unit along with all accessories shall be less than 1.5 kg. H. Enclosure Body: ABS body with Aluminium tube for Straw (shock proof) I. Indicator: Seven Segment Display for Temperature. LED for Supply ON, Heater ON, Battery Low

	J. Thawing Medium: Water as a medium for thawing (No air thawing) K. Methodology: Vertical Thawing L. Certification: Product should be ETDC Certified/ certified by renowned bull & semen center. M. Accessories: 12V/5A Adaptor, Thaw Monitor bag, Instruction Manual N. Warranty: 3 years onsite warranty with complete installation & demonstration	J. Thawing Medium: Water as a medium for thawing (No air thawing) K. Methodology: Vertical /Horizontal Thawing L. Certification: Product should be ETDC Certified/ certified by renowned bull & semen centre. M. Accessories: Adaptor cum battery charger, connector cable for motorcycle battery, Thawing unit carry bag, Instruction Manual etc N. Warranty: 3 years onsite warranty with complete installation & demonstration
VE-2	**Large Animal Ultrasound machine specification** A. The machine should have 2 kg weight with 5 -7 hour's battery backup. B. The machine should have carry case along with docking battery charger & should have car charger. C. The machine should have preset mode 8 cm, 12cm, 16cm and 24 cm. D. The machine should have 8.4" remote wireless display. E. The machine should have VGA bug's Screen display for daylight work to protect image for sun light. F. The machine probe should be capable to use endorectal as well as rumen scan with 3 to 7 mhz frequency and it should be auto adjustable when change scan mode. G. The machine probe should have a 60 mm radius and a 60º curve to give you a wide field of view and up to 24 cm depth, with detailed image information at near and deep range. The 128 crystals probe produces 40 frames per second across 16 digital channels, so there's no lag or image loss when scanning rapidly. H. The machine & probe should be water proof, dustproof, splash proof. I. The machine should have waist bag for mount machine with waist to carry machine at farm & field easily. J. The machine should have image storage facility at least 100 images and can make video through video splitter. K. The machine should have three batteries one for machine, one for monitor and one for standby. L. The machine should have fixed curved linear probe to protect probe pin damage. M. The machine should be of 150mm x 220m x 70mm	**Large Animal Ultrasound machine specification** A. The machine should have up to 3 kg weight with battery backup. B. The machine should be provided with carry case & battery charger C. The machine should have scanning depth ranging from 2 to 24 cm. D. The machine should have display ranging from 5.7 "to 12". E. The Screen display should have antiglare and anti dust function. F. The machine probe should be capable to use endorectal as well as rumen scan with 3 to 7 mhz frequency and it should be auto adjustable when change scan mode or machine should have dedicated veterinary Linear, convex and endorectal probe having multifrequency and broad band with tissue Harmonics. G. The machine probe should have a 60 mm radius and a minimum 60º up to 180^{0} preferably curve to give you a wide field of view 24 cm to 32 cm depth, with detailed image information at near and deep range. The 128 crystals probe to produce no lag or image loss when scanning rapidly. H. The probes of machine should be water proof, dustproof, splash proof. I. The machine should have carry case to carry machine easily. J. The machine should have minimum 100 image storage facility and can make video. K. The machine should have inbuilt or detachable batteries . L. The machine should have fixed curved linear probe or two universal probe connectivity. M. The machine should be handy and provided with trolley and Sonography Gel (10kg). N. Warranty: 3 years onsite warranty with complete installation & demonstration.

	dimension Warranty: 3 years onsite warranty with complete installation & demonstration	

VE-3	**Image recording system (Cassettes & Imaging Plates)**
	
	PSP image plates and cassettes approved for general radiography use must be quoted with the system.
	3.Cassettes should preferably have rewriteable label to avoid mix up of patient name / ID with image data before the same is brought to the CR reader / Digitizer from X-Ray room for cassette scanning / reading. The image plates should be rigid type or flexible plates mounted on tray for improved life and to reduce artifacts from dust or roller marks.
	Following cassette Size to be Supplied :-
	Size 14 X 17 = 2
	          10 X 12 = 2
	Image Reading (CR Reader / Digitizer)
	It should be able to process standard size cassettes
	The spatial resolution should be 10 pixels/mm at least for all general radiography application.
	It should have grey scale resolution of at least 20 bits / pixel for data acquisition and 16 bits / pixel for output to processor
	Time to preview image of should be less than 30secs
	The scanning resolution of 100 micron should be available for all cassette sizes
	The highest through put should be 100 plates/hr or better
	It should be a table top digitizer with horizontal cassette loading to protect from dust.
	It should have auto cropping feature to remove the unexposed pixels. This is to avoid zooming when smaller body parts/animal is examined with larger image plates.
	Processing Server / CR Workstation with 19" LCD Panel
	PC based unified server / workstation for centralized patient identification & management of Images / Studies. It should have provision to
	Process of identification should be ready for interface with existing Hospital Information System (HIS) or Radiology Information System (RIS) in DICOM protocols
	This Server must provide display of acquired images with greater details of demographics, like patient / study listing for easy access.
		Image recording system (Cassettes & Imaging Plates)
		
		PSP image plates and cassettes approved for general radiography use must be quoted with the system.
		Cassettes should preferably have rewriteable label to avoid mix up of patient name / ID with image data before the same is brought to the CR reader / Digitizer from X-Ray room for cassette scanning / reading. The image plates should be rigid type or flexible plates mounted/unmounted on tray for improved life and to reduce artifacts from dust or roller marks.
		Following cassette Size to be Supplied :-
		Size 14"X 17" = 2
		          10" X 12" = 2
		Image Reading (CR Reader / Digitizer)
		It should be able to process standard size cassettes
		The spatial resolution should be 10 pixels/mm at least for all general radiography application.
		It should have grey scale resolution of at least 12-20 bits / pixel for data acquisition and 12-16 bits / pixel for output to processor.
		Time to preview image of should be less than 45 secs
		The scanning resolution of 100 micron should be available for all cassette sizes
		The highest through put should be 60-100 plates/hr for 14"x17" sizes (for veterinary use)
		It should be a table top digitizer with horizontal cassette loading to protect from dust.
		It should have auto cropping feature to remove the unexposed pixels. This is to avoid zooming when smaller body parts/animal is examined with larger image plates.
		Processing Server / CR Workstation with 19" LCD Panel
		PC based unified server / workstation for centralized patient identification & management of Images / Studies.
		Process of identification should be ready for interface with existing Hospital Information System (HIS) or Radiology Information System (RIS) in DICOM protocols.
		This Server must provide display of acquired images with greater details of demographics, like patient / study listing for easy access.
		This sever must provide full amount of post processing features like Geometric

This sever must provide full amount of post processing features like Geometric Corrections, Window / Level, Algorithms, Annotations such as markers , predefined texts , drawing lines and geometrical shapes, , measuring distances and angles and determining leg length differences , Shuttering , histograms, Zoom, Grey Scale Reversal, Edge Enhancement, Noise Reduction, Indicate Grey Scale Saturation Level, Latitude Reduction. This terminal must provide a full fledge DICOM printing. Should be able to print in multiple formats (minimum 4) of a patient study, print a True Size image on any size of film. Should be able to send DICOM images to a DICOM viewing stations or PACS. Should be equipped with DICOM CD writer for allowing examination of a patient to be written onto a CD in DICOM format for referral purposes. It should support Vet specific Dicom tags and should have image processing software specially designed for veterinary applications. The following DICOM fields must be supported, Patient species description (0010,2201), Patient breed description (0010,2292), Responsible person (0010,2297), Responsible person Role (0010,2298), Responsible organization (0010,2299), Patient's Sex Neutered. DICOM conformance statement should be submitted. All the softwares, the digitser and the printer must from the same manufacturer and the quoted **Dry Imager (For Film Printing)** The system must be a Dry Imager, without need of any wet chemistry. The system must be DICOM 3.0 Print Service Class Provider, allowing minimum of 10 associations at a time. The system must be able to process at least 75 films / hour. The system must deliver its first film within 80 seconds from print request. The system must have a spatial resolution of 320 PPI / DPI or more for all sizes printed. The system must have at two online film sizes, and should be capable to print on any of the 8 " x 10 ". 10 " x 12 ". 11 " x 14 ", 14 "x17 "sizes two film input trays should be freely configurable at user level for all the mentioned film sizes. All the input trays should be freely configurable for loading any of the mentioned film sizes at user level.	Corrections, Window / Level, Algorithms, Annotations such as markers , predefined texts , drawing lines and geometrical shapes, measuring distances and angles and determining leg length differences, Shuttering, histograms, Zoom, Grey Scale Reversal, Edge Enhancement, Noise Reduction, Indicate Grey Scale Saturation Level, Latitude Reduction. This terminal must provide a full fledge DICOM printing. Should be able to print in multiple formats (minimum 4) of a patient study, print a True Size image on any size of film. Should be able to send DICOM images to a DICOM viewing stations or PACS. Should be equipped with DICOM CD writer for allowing examination of a patient to be written onto a CD in DICOM format for referral purposes. It should support Vet specific Dicom tags and should have image processing software specially designed for veterinary applications. The following DICOM fields must be supported, Patient species single description (0010,2201), Patient breed description (0010,2292), Responsible person (0010,2297), Responsible person Role (0010,2298), Responsible organization (0010,2299), Patient's Sex Neutered. DICOM conformance statement should be submitted. All the softwares, the digitser must from the same manufacturer and the printer quoted should of reputed brand. (Preferably laser printer) **Dry Imager (For Film Printing)** The system must be a Dry Imager, without need of any wet chemistry. The system must be DICOM 3.0 Print Service Class Provider, allowing minimum of 10 associations at a time. The system must be able to process 45-75 films / hour for 14"x17" size. The system must deliver its first film within 80 seconds from print request. The system must have a spatial resolution of 320 PPI / DPI or more for all sizes printed. The system should have at single/two online film sizes, and should be capable to print on any of the 8 " x 10 ", 10 " x 12 ", 11 " x 14 ", 14 "x17 "sizes Input trays should be freely configurable at user level for all the mentioned film sizes. Input trays should be freely configurable for loading any of the mentioned film sizes at user level. The printer should capable of printing first film within 10-30 minutes after switching on. **Interconnectivity** a)Interconnectivity between various CR modules should be Ethernet / TCP IP Based i.e. RJ 45 Connection (10 / 100 Base T / LAN). **Essential Software / Features**

The printer should capable of printing first film within 10 minutes after switching on. **Interconnectivity** a)Interconnectivity between various CR modules should be Ethernet / TCP IP Based i.e. RJ 45 Connection (10 / 100 Base T / LAN). **Essential Software / Features** a)Application related software like black border / black masking should be available b)The workstation should have feature for Grid line removal software. **U.P.S:** A suitable UPS with at least 15 minutes back up should be quoted with the system. **Furniture and other Equipments:** a) Furniture required to install CR system, Computer table and four revolving chair. b) Air conditioner and electrification as per need. **User Training:** Training regarding Operational instructions, trouble shooting and corrective action **Warranty:** 3 years onsite warranty with complete installation & demonstration	a)Application related software like black border / black masking should be available b)The workstation should have feature for Grid line removal software. **U.P.S:** A suitable UPS with at least 15 minutes back up should be quoted with the system. **Furniture and other Equipments:** a) Furniture required to install CR system: Computer table and four revolving chair. b) Air conditioner and electrification as per need. **User Training:** Training regarding Operational instructions, trouble shooting and corrective action **Warranty:** 3 years onsite warranty with complete installation & demonstration

Additional Commissioner of Animal Husbandry,
Maharashtra State, Pune-07