

Request for Proposal (RFP) for appointment of Agency for O&M of ITI Data Centres
RFP Ref No.: ITI/BGP/IT-DC/2023/2043 Date: 28/02/2023

Annexure- VII : Tools

Tools List for Data Center

Sl no	Tools Description	Size	Specification
1	Power Tester	813 to 815	multipurpose tester
2	Screw Driver (+star tip) insulated	3.5x150 mm Tip Dimension 3.5 x 0.5mm	Made out of high grade steel and The handle is made from high grade c. A. Plastic which is non flammable and unaffected by oil petrol, grease, water etc.
3	Screw Driver (+star tip) insulated	10.0x1.2mm	Made out of high grade steel and The handle is made from high grade c. A. Plastic which is non flammable and unaffected by oil petrol, grease, water etc.
4	Screw Driver (+star tip) insulated	5.0x0.8mm	Made out of high grade steel and The handle is made from high grade c. A. Plastic which is non flammable and unaffected by oil petrol, grease, water etc.
5	Screw Driver (+star tip) insulated	4.0x0.6mm	Made out of high grade steel and The handle is made from high grade c. A. Plastic which is non flammable and unaffected by oil petrol, grease, water etc.
6	Screw Driver (+star tip) insulated	8.0x1.2mm	Made out of high grade steel and The handle is made from high grade c. A. Plastic which is non flammable and unaffected by oil petrol, grease, water etc.
7	Screw Driver(- flat tip) insulated	10.0x1.5mm	Made out of high grade steel and The handle is made from high grade c. A. Plastic which is non flammable and unaffected by oil petrol, grease, water etc.
8	Screw Driver(- flat tip) insulated	10.0x1.2mm	Made out of high grade steel and The handle is made from high grade c. A. Plastic which is non flammable and unaffected by oil petrol, grease, water etc.
9	Screw Driver(- flat tip) insulated	5.0x0.8mm	Made out of high grade steel and The handle is made from high grade c. A. Plastic which is non flammable and unaffected by oil petrol, grease, water etc.
10	Screw Driver(- flat tip) insulated	4.0x0.6mm	Made out of high grade steel and The handle is made from high grade c. A. Plastic which is non flammable and unaffected by oil petrol, grease, water etc.
11	Screw Driver(- flat tip) insulated	8.0x1.2mm	Made out of high grade steel and The handle is made from high grade c. A. Plastic which is non flammable and unaffected by oil petrol, grease, water etc.
12	Heavy duty Screw Driver(-)	8,28,829	Made out of high grade steel and The handle is made from high grade c. A. Plastic which is non flammable and unaffected by oil petrol, grease, water etc.
13	Screw Driver (+ IN -)	Tip size: PH1, PH2, PZ1, PZ2, PZ2 + slot, TX15, TX20, TX25	For working on live components.Insulation (to DIN EN 60900) sprayed directly onto the blade,slim version: insulation integrated in the bit in the front section,individually tested,SoftFinish® handle with roll-off protection
14	Screw Driver (+ IN -)		For working on live components.Insulation (to DIN EN 60900) sprayed directly onto the blade,slim version: insulation integrated in the bit in the front section,individually tested,SoftFinish® handle with roll-off protection
15	Screw Driver (+ IN -)		For working on live components.Insulation (to DIN EN 60900) sprayed directly onto the blade,slim version: insulation integrated in the bit in the front section,individually tested,SoftFinish® handle with roll-off protection

16	Nut driver set (multi purpose)		Protective insulation DIN EN 60900, insulated up to 1000 V, certified 'GS' safety, individually tested, Inner bore for protruding bolts, Blade insulation, Sprayed directly on the blade, VDE insulated, Material of the grip handle: 2-component plastic, Blade length: minimum 125 mm, Material: Chrome-vanadium steel.
17	Cutting Plier (combination plier)	250mm,	combination Plier Made from high grade steel, forged, and differently heat treated to give best performance, Fully Insulated with Quality Plastic Material Sleeve Ensures Safe Electrical Working, Excellent wire cutting ability for soft and hard wires, fully polished head or black phosphated and bright polished head, VDE certified and rated to 1000 V AC, these insulated heavy duty linesman combination pliers are as well compliant with international standards such as IEC 60900 and ASTM F1505. Heavy duty 8 inch 1,000 V rated lineman plier.
18	Cutting Plier (combination plier)	210mm,	combination Plier Made from high grade steel, forged, and differently heat treated to give best performance, Fully Insulated with Quality Plastic Material Sleeve Ensures Safe Electrical Working, Excellent wire cutting ability for soft and hard wires, fully polished head or black phosphated and bright polished head, VDE certified and rated to 1000 V AC, these insulated heavy duty linesman combination pliers are as well compliant with international standards such as IEC 60900 and ASTM F1505.
19	Cutting Plier (combination plier)	180mm	combination Plier Made from high grade steel, forged, and differently heat treated to give best performance, Fully Insulated with Quality Plastic Material Sleeve Ensures Safe Electrical Working, Excellent wire cutting ability for soft and hard wires, fully polished head or black phosphated and bright polished head, VDE certified and rated to 1000 V AC, these insulated heavy duty linesman combination pliers are as well compliant with international standards such as IEC 60900 and ASTM F1505.
20	Nose Plier	INSULATED LONG NOSE /W SIDE CUTTER, 8 IN, 200MM, 1000V	Unique milled wave patten gripping zones, 4 gripping points for pulling round objects with superior grip that won't slip, Added value working sensitive pieces - copper tubes, thread, cable, Straight, half-round, long and slim knurled jaws, specially profiled, greatest safety, comfort, quality, and ruggedness when working on energized circuits these insulated long nose pliers with side cutters and gripping zones feature a nominal length of minimum 8" (200 mm). Ideal for cutting and gripping where fingers and other tools are too big.
21	Nose Plier	INSULATED LONG NOSE /W SIDE CUTTER, 6 IN, 180MM, 1000V	Unique milled wave patten gripping zones, 4 gripping points for pulling round objects with superior grip that won't slip, Added value working sensitive pieces - copper tubes, thread, cable, Straight, half-round, long and slim knurled jaws, specially profiled, greatest safety, comfort, quality, and ruggedness when working on energized circuits these insulated long nose pliers with side cutters and gripping zones feature a nominal length of minimum 8" (200 mm). Ideal for cutting and gripping where fingers and other tools are too big.
22	Wire Cutter	INSULATED HIGH LEVERAGE DIAGONAL CUTTER, 8 IN, 200MM, 1000V	VDE certified and rated to 1000 V AC, these insulated heavy duty high leverage diagonal pliers are as well compliant with international standards such as IEC 60900 and ASTM F1505. The unique, ergonomic yet rugged design provides extra safety and adherence to users Heavy duty, high leverage 8-inch diagonal cutting pliers, Cuts hard materials including steel and piano wire, Power joint and precision cutting edges, Certified to 1000 V ac, 1500 V dc, metal should be chromium-molybdenum-vanadium steel,

23	Wire Cutter	INSULATED HIGH LEVERAGE DIAGONAL CUTTER, 6 IN, 1000V	VDE certified and rated to 1000 V AC, these insulated heavy duty high leverage diagonal pliers are as well compliant with international standards such as IEC 60900 and ASTM F1505. The unique, ergonomic yet rugged design provides extra safety and adherence to users, Heavy duty, high leverage 8-inch diagonal cutting pliers, Cuts hard materials including steel and piano wire, Power joint and precision cutting edges, Certified to 1000 V ac, 1500 V dc, metal should be chromium-molybdenum-vanadium steel,
24	wire strippers		multi-function wire stripper, shears and pliers, VDE certified and rated to 1000 V AC, these insulated heavy duty high leverage diagonal pliers are as well compliant with international standards such as IEC 60900 and ASTM F1505. The unique, ergonomic yet rugged design provides extra safety and adherence to users, Heavy duty,
25	Adjustable Spanner 6"		Made from high grade steel, forged and accurately machined. Hardened and tempered to give long trouble free service. Provide with appropriate surface protection for rust prevention
26	Adjustable Spanner 12"		Made from high grade steel, forged and accurately machined. Hardened and tempered to give long trouble free service. Provide with appropriate surface protection for rust prevention
27	Pipe Wrench-36" (heavy Duty)		Built with durable ductile-iron housing and an I-beam handle for long-lasting reliability, A full floating forged hook jaw offers superior gripping and allows you to make quick adjustments, Heavy-duty RIDGID pipe wrenches comply with federal specifications GGG-W65IE, Type II, Class A, Self-cleaning threads with easily replaceable hook jaw, heel jaw and spring assembly, Replaceable Parts; Hook jaw, heel jaw, and spring assembly, Pipe Capacity: 5 inch,
28	Hammer 450G,		Python Claw Hammer 2G Indestructible Fiberglass, Ideal for Nail Framing and Removing Nails, Curved Claw Generates Nail-Pulling Leverage, Unbreakable and Indestructible Fiberglass Handle
29	Hammer 2kg		Real Heavy Duty Sledge Hammer Fine Fiber Handle, Scientifically hardened and tempered to ensure combination of hardness and toughness, Drop forged from carbon steel, Ergonomic rubber grip handle absorbs shock and vibration reducing fatigue special bonding process ensures that head never gets loose from the handle, Unbreakable and indestructible handle
30	Measuring Tape 5M	Size: 5M x 19mm	Tough ABS Case. Durable Steel Blade. Polymer Coated Blade for Long Life. TrueZero(TM) Hook for Accurate Inside and Outside Measurements.
31	Measuring Tape 50M		Tape ribbon manufactured from fiberglass yarn coated with tough, weather resistance PVC. Fiberglass tape ribbon should be non-conductive, non-creasing, weather resistant and durable against wear and tear.
32	No 831 Screw Driver Set (8 Tool+handle)		8 piece screwdriver set should come with a detachable HANDLE. 2 different sizes of star head screwdrivers and 3 types of flathead screwdrivers. Just slip the piece with the appropriate head into the handle and lock it in the jaw at the top of the handle.
33	Wire Brush 5 Row (SS)		Brushes used for scratching, burr removal and cleaning.
34	Hss Drill Bit (2mm To 13 mm) Set 25Nos		120° tip angle for self-centering and good precision. Suitable for drilling various metals and wood.
35	Hack Saw Frame Small		Superior quality steel wire frame is designed to ensure correct alignment and give perfect blade tension during use
36	Hack Saw Frame Big		Die cast frame with 'D' style handle for user comfort and control. Wing nut blade tensioning. Supplied complete with 300mm 24tpi blade. Fully insulated,

37	Allen wrench Key Set (hex set) 26 piece		High Quality Surface Treatment: 13pcs (1.27-10mm) metric system with electroplating matte surface treatment, 13pcs (3/64-3/8inch) imperial system and 9pcs (T10-T50) star key with blackening surface treatment,36pcs allen wrench tool set is corrosion resistant and each tool is organized neatly into the holders for quick and easy access. Complete varieties and specifications, this wrench set can be enough for all fasteners, Type: Hex Key, Star Key ,Material: Chrome Vanadium Steel(CR-V 6150#) + PP + TPR.
38	Total File	Flat Taper, Half Round, Three Square, Square, Round & Flat Parallel Files	6 inch file set of 6pcs. Different kinds of files,Material: Carbon steel,
39	DE Open Ended Spanner set		Chrome-Vanadium Steel
40	DE RING Spanner		
41	Socket Spanner set		
42	Crimping Tool vaccum type (Range: 16-400mm2)	650(L) X 150(H) X 70(W) mm	HT- 3510 Hydraulic Crimping Tool, 13T/ 130KN
43	Instrument & Electrical Equipments		
44	Multi meter (with calibration certificate)	<u>fluke 17B+ or higher</u>	Maximum voltage between any terminal and earth ground,1000V, Display (LCD);4000 counts, updates 3/sec,Battery type; 2 AA, NEDA 15A, IEC LR6,Battery life: 500 hours minimum (50 hours in LED Test mode without load. The hours with load depends on the type of LED under test.),Fuse protection for current inputs: 440 mA, 1000 V Fast Fuse, Fluke specified part only. 11A, 1000V Fast Fuse,product meets requirements for industrial (Class A) electromagnetic wave equipment,All ac, Hz, and duty cycle are specified from 1% to 100% of range. Inputs below 1% of range are not specified,Typically, open circuit test voltage is 2.0 V and short circuit current is <0.6 mA.
45	Digital Clamp meter (with calibration certificate)	Fluke 381 remote display RMS AC/DC	1000 A ac and dc current measurement with fixed jaw,2500 A ac current measurement with iFlex™ flexible current probe,1000 V ac and dc voltage measurement,True-rms ac voltage and current for accurate measurements on non-linear signals, Frequency measurement to 500 Hz with both jaw and iFlex™ ,60 kΩ resistance measurement with continuity detection,Min, max, average and inrush recording to capture variations automatically, Wireless technology allows the display to be carried up to 30 ft away from the point of measurement for added flexibility without interference with measurement accuracy, iFlex™ flexible current probe expands the measurement range to 2500 A ac while providing increased display flexibility, ability to measure awkward sized conductors and improved wire access,Proprietary inrush measurement technology to filter out noise and capture motor starting current exactly as the circuit protection sees it,The removable magnetic display can be conveniently mounted where it is easily seen, Radio transmitter automatically turns off when the display is connected to the meter.Large, easy to read, backlight display automatically sets the correct measurement range so you do not need to change switch positions while taking a measurement Soft carrying case.

46	Sling psychrometer (with calibration certificate)	Fluke 971	Quickly and conveniently take accurate humidity and temperature readings with the meter, invaluable for facility maintenance and utility technicians, HVAC-service contractors, and specialists who assess indoor air quality (IAQ). Lightweight and easy to hold, Backlit dual display of humidity and temperature, Measures dew point and wet bulb temperatures, 99 record storage capacity, Quick-response capacitance sensor, Compact and lightweight (188 g /6.6 oz), Temperature range from -20 °C to 60 °C (-4 °F to 140 °F) Relative humidity from 5% to 95%
47	Megger 5000 volts, 1000m ohms (with calibration certificate)	Fluke 1555	The tester's accuracy is specified for one year after calibration at operating temperatures of 0 °C to 35 °C. For operating temperatures outside the range (-20 °C to 0 °C and 35 °C to 50 °C), add $\pm .25\%$ per °C, except on the 20% bands add $\pm 1\%$ per °C, test voltages up to 5 kV (1550C) and 10 kV (1555) and save time by trending on the spot, CAT III 1000 V, CAT IV 600 V safety rating, Selectable test voltages in 50 V steps from 250 V to 1000 V, and 100 V steps above 1000 V,
48	Digital Earth resistance tester with probes & cables (with calibration certificate)	Fluke VT04 combo kit	Compact and intuitive, the VT04A and VT04 Visual IR Thermometers blend a visual image with a heat map overlay, to help quickly identify the location of issues, Specifically designed for HVAC professionals for temperature and microamp measurements, the Fluke 116 digital multimeter has everything you need in an HVAC meter. The VT04 Visual IR Thermometer Maintenance Kit includes the VT04 and 1507 Insulation Resistance Tester – two products that are ideal for troubleshooting and preventive maintenance. see the specs in the Fluke VT04 visual IR thermometer HVAC combo kit.
49	Thermometer (Infrared) (with calibration certificate)	Fluke CNX t3000	Temperature measurements from -200 °C to 1372 °C, $\pm 0.5\%$ accuracy, Memory recording up to 65,000 readings,
50	Light Meter (Lux meter) (Digital) (with calibration certificate)	Fluke 941	Measure in lux or foot-candles, with one button to switch between display options, Data hold to freeze reading on the digital display, Min/max ability to show high and low readings, can measure visible light sent from a variety of light sources, to include fluorescent, metal halide, high pressure sodium, or incandescent lamps. With an extension cord to the light meter and separate display provides a handheld tool to accurately measure light in multiple environments. Features : Clean room environments, agriculture, HVAC operations Room illumination assessment as part of environmental health and safety reviews Light source quality and troubleshooting.
51	Rechargeable Torch (Industrial use)		
52	Electric Blower		Min/Max/Avg Data hold
53	Drilling machine with smart drill kit (Bosch)		
54	HT Glove (3M)		Seamless Natural Latex Rubber Easy to use. Tested and Certified
55	LT glove (3M)		hand gloves having excellent grip water resistance high strength lightweight, high durability, flexibility and made from specially compounded latex for compute insulation., It should be 100% shock proof
56	Electrical cotton glove (3M)		should have Nitrile palm coating, flexible, abrasion-resistant, long-lasting and highly durable
57	Non contact voltage tester		Voltbeat technology and continuous self test CAT IV 1000 V for added protection, Expanded Range: 90-volt to 1000-volt AC having IP rating "IP 40"
58	Utility knife	Taparia UK-3 Steel	retractable cutting blade which can lock into different positions depending on use The blade should be sharp with symmetric edges for optimum cutting experience. The handle should have knife lock facility.
59	Safety shoes (as per requirement size)		Electric Resistant, Heat Resistance Upto 120 C Steel Toe Light Weight

60	Safety Belt (full body)	Karam PN-43	FULL BODY ADJUSTABLE WORK POSITIONING SIT HARNESS WITH PADDED LEG STRAP & SHOULDER STRAP, ONE VENTRAL D-RING, ONE STERNAL D-RING, ONE DORSAL ATTACHMENT D-RING, TWO LATERAL D-RINGS ON THE SIDE.
61	hand screw machine		At least 50% more battery run time and 5 times longer motor life than a non-brushless motor, High performance - max torque 140Nm, 3.0Ah Lithium-Ion battery pack; doesn't lose its charge whilst not in use LED light for improved visibility, speed-0-2800rpm, blows per minute-0-3300bpm, forward and reverse rotation, soft grip handle.
62	Manifold gauge (high pressure low pressure)		R134 R410a R22 R404a Manifold Gauge High Low Pressure Gauge With hose, 1pc auto air conditioning manifold gauge, High pressure gauge range: 0-55Bar(800Psi).
63	Hydraulic Trolley (hand pallet truck) 3 ton		
64	Manual Hydraulic lift table Trolley (hand pallet truck) 3 ton		a model to suit each horizontal pallet transport, loading / unloading lorries as well as order picking movement. With load capacities up to 3 ton
65	Ladder		Bathla
66	Walkie talkie 1 Km range		Clear, crisp communication with easy button access . Water Resistant - Prevents damage from light water exposure Mic and Headphone Jacks . Charges through the headset jack
67	Metal detector (HHMD-3000) Rechargeable		1 Metal Hand-Held metal detector will include body search for offensive weapons in crowd control for metal objects and anywhere that hidden metal needs to be detected.
68	Tile Puller	Unitile make	premium quality rubber suction cups to provide a strong, safe grip on even the heaviest floor tiles.
69	Shoe cover dispensary		shoe cover dispenser, Material Aluminium,
70	phase sequence meter	N/a	3 phase
71	Zigzag cutting machine	medium size	Typical Range
72	Density hydro meter for diesel	typical	Typical Range
73	Thermo meter for diesel	typical	Typical Range
74	Hot glue gun with glue sticks	typical	stanly
75	Heat gun	typical	stanly
76	Battery charger	12/24V 200Ah (20amps)	
77	First aid KIT	typical	Medium
78	Electrical loto lockout kit & station	typical	Asion
79	Dual Pressure Gauge A/C Diagnostic Manifold Tester Set HVAC R12 R22 R502 Charging Kit (Refrigerant gauge) with hose	typical	Typical Range
80	CATU insulated sticks (Earth isolation rod with cable) HOT Stick	typical	Medium size
81	Vacuums Cleaner	medium size	Typical Range
82	White board	100*200 CM	Medium size
83	Heavy Duty Hand Cable Cutter	150mm	24 inch length
84	Torque wrench Set		

85	Rain coat	M,L,XL, XXL.	
86	Umbrella	Typical	
87	Gum Boots	M,L,XL, XXL.	
88	Waterproof Rubberized Sealing and Bonding Tape	5meter length and 4" width.	PATCH large holes, cracks, gaps and tears,Super Strong, Rubberized, Waterproof Tape,Patch, Bond, Seal and Repair Virtually Anything
89	Hydrometer (for battery SG)	typical	Battery Hydrometer Specific Gravity Tester

Note:-

1. The Tools mentioned abover are the minimum requirement, However the selected bidder shall ensure the availability of tools required for any other maintenance work.
2. Similarly, bidder shall arrange storage almirah required for keeping the items/tools safely as applicable.
3. Sufficient Quantity to operate day to day maintenance activity for 1000 Racks Data Center Operations.