**PERKHIDMATAN MEMBEKAL, MEMASANG, MENGUJI DAN MENTAULIAH FASILITI DAN KELENGKAPAN PUSAT DATA PEMULIHAN BENCANA (DRC) DI WISMA SKUDAI UNTUK KEGUNAAN MAJLIS BANDARAYA ISKANDAR PUTERI**

**SPESIFIKASI TEKNIKAL**


| BIL. | BAHAGIAN | MUKA SURAT |
|---|---|---|
| A | **KERJA KERJA AWALAN** | 2/%<br>P% |
| B | **MEMBEKAL , MEMASANG PERKAKASAN, MENGUJI,MENTAULIAH, PERKHIDMATAN SOKONGAN DAN BANTUAN TEKNIKAL BAGI SMART RACK SYSTEM** | 3/%<br>P% |
| C | **MEMBEKAL , MEMASANG PERKAKASAN, MENGUJI,MENTAULIAH, PERKHIDMATAN SOKONGAN DAN BANTUAN TEKNIKAL BAGI PERKAKASAN SWITCH** | 6/%<br>P% |




DIJANA OLEH -
11.11.2026

| BIL. | SPESIFIKASI | YA | TIDAK | CATATAN |
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| A | **KERJA KERJA AWALAN** | | | |
| A.1 | **Preliminaries charges inclusive of services during the project**<br><br>a) Erection All Risk and Workmen Compensation<br>b) Necessary site protection<br>c) Carting away of debris from site<br>d) Documentations and drawings<br>e) Work after office hour / weekend inclusive drilling works<br>c) Project Management & Supervision<br>d) Project Documentation | | | |

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| B | **MEMBEKAL , MEMASANG PERKAKASAN, MENGUJI,MENTAULIAH, PERKHIDMATAN SOKONGAN DAN BANTUAN TEKNIKAL BAGI SMART RACK SYSTEM** | | | |
| B.1 | **Huawei Fusion Module 800 atau YANG SETARA DENGANNYA**<br><br>Location:DRC MBIP,Wisma Skudai<br><br>To supply and deliver- Integrated Row consist of the followings: -<br><br>- (1) 10kVA Rack mounted UPS with 15min backup time based<br>- (1) 42U 600mm(W) x 1350mm(D) x 2000mm(H) M-type Converged cabinet<br>- (2) 42U 600mm(W) x 1350mm(D) x 2000mm(H) M-type Usable cabinet<br>- (1) 42U 800mm(W) x 1350mm(D) x 2000mm(H) M-type Usable cabinet<br>- (6) Metered type rPDU-1PH 32A-20*C13+4*C19-Full height vertical<br>- (1) 12.5kW Smart cooling NetCol5000<br>- (1) Portable Touch Screen Pad<br>- (1) Temperature and Humidity Sensor<br>- (1) Non positioning water immersion sensor<br>- (1) ECC800-Pro-Controller<br>** Integrate to existing NetEco6000 located at HQ Data Centre<br><br>**SMART RACK INTERGRATION WORKS**<br>To provide labour to install Smart Rack:-<br>a) To lift and position the Smart Rack<br>b) To pull and terminate all control wiring for ECC800 Pro, Access System and ELV system inside of Smart Rack<br>c) Authorised Services Engineer to start up the new Smart Rack UPS<br>d) Certified engineer to startup Smart Rack<br>e) To test and configuration Smart Rack inclusive of software configuration<br><br>To supply labour and materials to install Smart Cooling system c/w following:-<br>- Supply and install copper piping c/w all accessories and fittings. (Single Circuit) and iron bracket for R410A gas (within 20m ONLY)<br>- Nitrogen pressure hold test with 300psi<br>- 1 " dia. PVC drain pipe with insulation<br>- Outgoing control wiring in G.I. trunking<br>- Condenser bracket<br>- Drain pump<br>- Workmanship to do hacking and making good for mechanical<br>- G.I. Discharge Air Duct for Outdoor units<br><br>**INCLUSIVE SUPPORT AND MAINTANCE (FOR 3 YEARS)**<br><br>To provide the 8x5NBD for smart rack system, support system, preventive and corrective maintenance<br>a) Smart Rack system (UPS, CRAC, EMS, etc)<br>b) Fire suppression<br>c) HSSD<br>d) Water Detection System<br>e) Earthing System<br><br>f) Switch<br><br>**INCLUSIVE TRAINING**<br><br>a) Certified Data Center (4 PAX)<br><br>b) Administration and Operation (5 PAX) | | | |
| B.2 | **ELECTRICAL WORKS**<br><br>To supply and install 100A Tap-off c/w the following features:-<br><br>Incoming<br>a) (1) 100A MCCB TPN<br>b) (1) ELR<br>c) (1) RYB Phase light<br><br>Outgoing<br>a) (1) 100A TPN MCCB (SR DB)<br>b) (1) Internal Wiring | | | |
| B.2.1 | **To supply and install 100A SR-DB c/w the following features:-**<br><br>Incoming<br>a) (1) 100A MCCB TPN<br>b) (1) ELR<br>c) (1) Digital power Meter<br>d) (1) Surge Arrester<br>e) (1) RYB Phase light<br><br>Outgoing<br>a) (1) 100A TPN MCCB (Huawei FM800)<br>b) (1) 20A TPN MCCB (Utility)<br><br>Utility Outgoing<br>a) (3) 20A 2P 100mA RCCB<br>b) (9) 10/20A 2P MCB | | | |
| B.2.2 | **Submain Cabling**<br><br>Submain cabling using 4 x 1c x 50mmÂ² XLPE/PVC + Earth Cu. Cable from Ext MSB to New Tap-off Unit (20 meters) | | | |
| B.2.2.1 | **Submain Cabling**<br><br>Submain cabling using 4 x 1c x 50mmÃ?Â² XLPE/PVC + Earth Cu. Cable from New Tap-off Unit to New SR DB | | | |

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| B.2.2.2 | **Submain Cabling**<br>Submain cabling using 4 x 1c x 50mmÂ² XLPE/PVC + Earth Cu. Cable from New SR DB to Integrated Row (10 Meters) | | | |
| B.2.2.3 | **Submain Cabling**<br>Subcircuit wiring using 2 x 1c X 6mmÂ² PVC + Earth PVC Cable for 32A SPN commando socket | | | |
| B.2.2.4 | **Submain Cabling**<br>Electrical single line diagram endorsed by Certified Electrical Professional Engineer with Practicing Certificate. | | | |
| B.2.2.5 | **Submain Cabling**<br>To lay new cable tray or trunking/routing installation for Submain Cabling | | | |
| B.2.2.6 | **Submain Cabling**<br>Testing and commissioning of electrical system | | | |
| B.3 | LIGHTING | | | |
| B.3.1 | **2' x 4' LED Lighting**<br>To supply and install 1200mm x 600mm 2 x 18W T8 LED type tube lighting c/w wiring point using 2 x 1C x 1.5sq.mm PVC cu.cable + Earth cable in GI conduit | | | |
| B.3.2 | **Emergency Light**<br>To supply and install LED Emergency light with battery pack c/w point using 2 x 1C x 1.5sq.mm PVC cu.cable + Earth cable in GI Conduit | | | |
| B.3.3 | **Signage "Keluar"**<br>To supply and install LED type Keluar Sign c/w wiring point using 2 x 1C x 1.5sq.mm PVC cu.cable + Earth cable in GI conduit | | | |
| B.4 | **ICT WORKS**<br>To provide the physical migration works without touch the configuration for server, switches, cabling and other related accessories inside the data center. (System configuration, restart/shutdown by others) | | | |
| B.4.1 | **Copper Cabling**<br>To supply and install to lay UTP Cat.6A UTP Cable consist of the followings :-<br>a) Cat.6A UTP cable<br>b) Cat.6A information outlet c/w faceplate<br>c) Inclusive of labour charges for installation & labelling<br>To supply and install Cat.6A 24port patch panel c/w termination works & labelling<br>To supply and install wire management panel<br>To supply and install 2metre length of Cat.6A patch cord c/w RJ45 plug at both end (Factory Terminated)<br>To supply 3metre length of Cat.6A workstation cord c/w RJ45 plug at both end (Factory Terminated)<br>To supply labour and material to install hardware & fitting to house above cable c/w PVC conduit | | | |
| B.5 | **CIVIL WORKS, DECOMMISIONING & DISMANTLING WORKS**<br>To provide labour to dismantle and remove unused equipment to nearest store within same building<br>a) Rack - (Excluded power shutdown ICT equipment)<br>b) UPS and Batteries<br>c) CRAC<br>d) EMS<br>e) Included touch up painting and raised floor on affected area | | | |
| B.5.1 | **RENOVATION WORK / BUILDER WORK**<br>To provide site protection and temporary hoarding works for Server Room construction area and cover up construction area during construction works to segregate working area from floor slab to ceiling slab to prevent dust flow. | | | |
| B.5.1.1 | **DISMANTLING WORK**<br>To dismantle, demolish and dispose as below existing services;<br>- Existing Wall partition<br>- Door<br>- Plaster Ceiling<br>- Cart away and remove debris | | | |

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| B.5.1.2 | **PARTITION AND DOOR**<br>To supply and install 2-hour fire rated partition<br>Room Height: 3570mm Floor Slab to Ceiling Slab<br><br>To supply and install 2-hour fire rated Double Leaf Door in laminate finish<br><br>Dimension: 1200mmL x 2400mmH<br><br>To supply and install black-out sticker at existing Server Room glass window parameter<br><br>Dimension: 9300mmL x 1200mmH<br><br>To paint new wall, existing wall, internal and external room parameter and other affected area with emulsion painting | | | |
| B.5.1.3 | **CEILING**<br>To supply and install 2'x4' suspended ceiling using 9mm pinhole gypsum ceiling board | | | |
| B.5.1.4 | **RAISED FLOOR**<br>To supply and install Raised Floor system for new area to suit new layout c/w the followings;<br><br>- Pedestal assemblies<br>- Double cup suction lifter<br>- Cut hole opening suit new layout<br>- Make good of existing raised floor at affected renovation area | | | |

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| C | **MEMBEKAL , MEMASANG PERKAKASAN, MENGUJI,MENTAULIAH, PERKHIDMATAN SOKONGAN DAN BANTUAN TEKNIKAL BAGI PERKAKASAN SWITCH**<br><br>To supply and install 8 SFP+ 10GigE, 2 QSFP+ (20G) with switch accessories and **3 YEARS** principal support :-<br><br>**a)Support:-**<br><br>-**3 YEARS** Partner SUPPORT Plus for all. Includes 24x7 Remote Tel Support, Diagnosis, SW Upgrades, Access to support portal, and next day AVR.Power Supplies are included in advance hardware replacement<br><br>**b)**Maintenance and On-Site (**3 YEARS**):-<br>-To provide the 8x5NBD for switch configuration,preventive and corrective maintenance.<br><br>**c)**Switch Installation and intergration with the DRC and level G :- | | | |
| C.1 | **DISTRIBUTION SWITCH**<br><br>Product Name:**OS6560-X10-UK atau YANG SETARA DENGANNYA**<br><br>-OS6560-X10 10GigE fixed chassis 8 SFP+ 10GigE, 2 QSFP+ (20G) stacking ports. 1RU size, internal AC power supply. Includes a UK power cord, guides, and 19" rack mount hardware. DNV Certified. | | | |
| C.2 | **TRANSCEIVER & DAC**<br><br>To supply and install tranceiver and stacking cable as per below requirement :-<br>Product Name:**OS6560-CBL-100 atau YANG SETARA DENGANNYA**<br>-OS6560 20 Gigabit direct attached stacking copper cable 100 cm, QSFP+<br><br>**INCLUDE**<br>Product Name:**SFP-10G-SR atau YANG SETARA DENGANNYA (6 Unit).**<br>-10 Gigabit opticaltransceiver SFP+.Supports multimode fiber over 850nm wavelenghtnominal with an LC connector.<br><br>Product Name:**SFP-10G-LR atau YANG SETARA DENGANNYA (2 Unit).**<br>-10 Gigabit optical transceiver SFP+). Supports monomode fiber over 1310nm wavelength nominal with an LC connector.<br><br>Product Name:**SFP-GIG-T atau YANG SETARA DENGANNYA (2 Unit).**<br>-1000Base-T Gigabit Ethernet Transceiver SFP MSA) - Supports category 5, 5E, and 6 copper cabling up to 100m. SFP works at 1000 Mbit/s speed and full-duplex mode. | | | |