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VRN 10-01-015927

TIN NO 101-328-449

Number: 28

QUOTATION

Customer		Date
Attention	Mr. Abassy	09-Feb-03
Name	National Bureau of Statistic	
Address		
City	Dar es Salaam	
Country	Tanzania	
Telephone		
Fax		
Email		

Description	QTY	Units	CURR	Unit Price	Amount	VAT	Total Amount
Installation of SQL Server and Client Configuration	1		US\$	2,000.00	2,000.00	400.00	2,400.00
3 Month Support Charges	1		US\$	900.00	900.00	180.00	1,080.00
Total						US\$	3,480.00

Prepared by: Humphrey Nkala

Terms & Condition

1. Please provide Purchase Order
2. All Cheaques payable to VisionIT

Thank you for your continued support



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Number: 26

QUOTATION

Customer		Date	28-Aug-03
Attention	Mr Abassy		
Name	National Bureau of Statistic		
Address			
City	Dar es Salaam		
Country	Tanzania		
Telephone			
Fax			
Email			

Description	QTY	Units	CURR	Unit Price	Amount	VAT	Total Amount
24 Port 100BaseT3Com (High Quality Switch)	2	Pcs	US\$	950.00	1,900.00	0.00	1,900.00
UTP Cable	8	Pcs	US\$	75.00	600.00	120.00	720.00
Wall Box	40	Pcs	US\$	20.00	800.00	160.00	960.00
RJ45 Connector	120	Pcs	US\$	1.00	120.00	24.00	144.00
Flex Conduct	120	Pcs	US\$	3.00	360.00	72.00	432.00
UTP Drop Cable	40	Pcs	US\$	7.50	300.00	0.00	300.00
9U Rack Cabinet	1	Pcs	US\$	450.00	450.00	0.00	450.00
Labour Charges	1		US\$	850.00	850.00	170.00	1,020.00
Total						US\$	5,926.00

Prepared by: Humphrey Nkala

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Library Shelves
 2 Sides 5x2 Shelves
 Lipana = 1m
 @ 216,000/2
 bita kudu
 @ 180,000/2

 Meza = 180,000/2
 bita kudu = 150,000/2

 Office chair (Viti)
 bita mkono @ 276,000/2
 panga mkono @ 300,000/2
 Single Periodical Rack
 @ 110,000/2

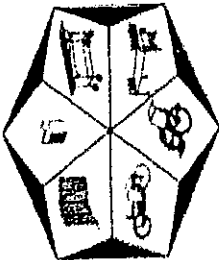
Murtaza Bodalbhai
 General Manager

PALRAY LIMITED

Manufactures & Importer of : Sheet Metal, Tubular & Wooden Furniture For
 Offices, Hospitals, School, Household & Turnkey Interiors Decorators

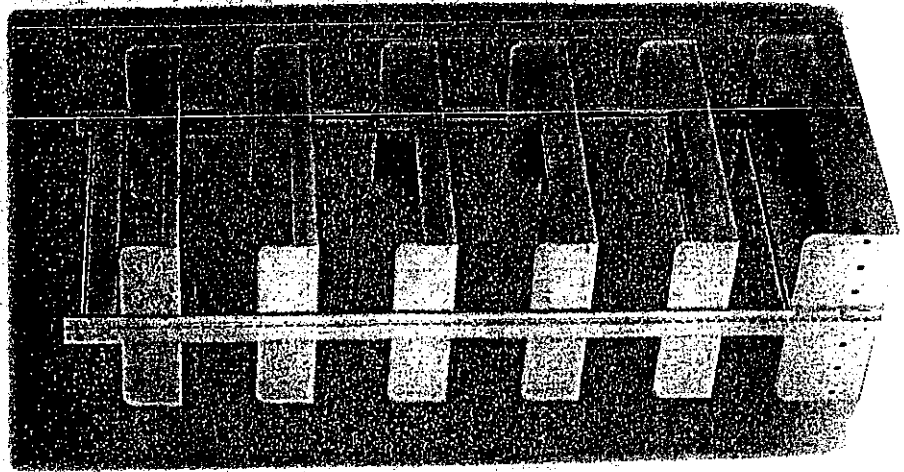


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PALRAY LTD

PALRAY



- LIBRARY SHELVINGS DOUBLE SIDED
- MADE FROM MILD STEEL SHEETS
- ADJUSTABLE SHELVINGS
- EASY FOR TRSPORT (DETACHABLE)
- SIZE: 2M H X 1M W X 9"OR 10" DEPTH
- FIVE SHELVES ON EACH SIDE
- ACCOMODATES APPROXIMATELY 35 TO 40 BOOKS IN EACH SHELF.
- PAINTED WITH GREY OR BEIGE SYNTHETIC PAINT.

PALRAY LTD
P O BOX 1916
DAR ES SALAAM

TEL: 2861920
FAX: 2861920
MOBILE: 0741-30499
0741-525868

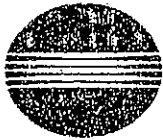
EMAIL: palray@ccils-net.com or
mpalray@botmail.com

**BRITHOL
MICHCOMA**
COMPANY LIMITED

BENJAMIN A. NYANG'A
OPERATOR

Azikiwe Samora
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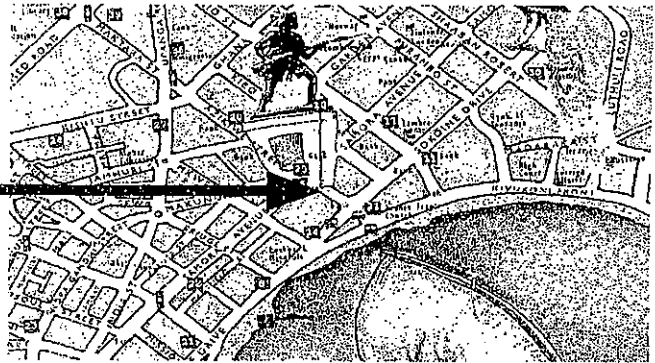
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E-mail :bmtz@raha.com



MINOLTA

Copy Shop
Tel. 2111097

We are here



In our Copy Shop situated within NSSF Hifadhi House, adjacent to NBC City Branch, we have quality equipment to provide you with the following services;

- Scan Technical drawings up to "A0"size.
- Print drawings (Auto Cad).
- Copy Technical drawings on paper rolls up to (6) meters long.
- Reduce or magnify drawing sizes.
- Design and print business cards.
- Copy and bind documents on our fast and quality machines.

jez #8
A3/A4
MINOLTA CS PRO
EP1054
→ \$ 2500\$
MINOLTA CS PRO
EP6001
→ \$ 12000\$

Please visit our copy shop or phone us for **FREE** pick-up and delivery system.*
*Work over shs15,000.00

(2) 機材カタログ (写し)



PowerEdge™ 4600

The PowerEdge 4600 is a state-of-the-art departmental server that incorporates the highest performing Intel® Xeon™ processor, the highest performing chipset from ServerWorks, and is designed with features to help provide continuous operation, high availability, and excellent data protection.

System

Recommended Deployment

-
- E-business: E-commerce, B2E, B2B
 - Standard: Messaging and Collaboration, Content Management, Database
 - Core Infrastructure: Internet access, Virtual Private Network, High-availability clustering, Backup and restore

Processors

-
- Up to 2 Intel® Xeon™ processors at 2.4GHz to 3.0GHz

Front Side Bus

-
- 400MHz front side bus allows for faster data throughput compared to legacy 133MHz front side bus speeds

Cache

-
- 20KB Level 1 cache (12KB instruction cache and 8KB two-way write-back data cache)
 - 512KB Level 2 cache (full processor speed)

Chipset

-
- ServerWorks Grand Champion High End(GC-HE) chipset utilizes 4-way memory interleaving and a five peer PCI bus architecture for uncompromising I/O throughput

Memory

-
- 512MB - 24GB 200MHz ECC DDR (Double Data Rate) SDRAM
 - Features four-way memory interleaving for higher performance (requires DIMMs to be added in set of four of equal capacity)
 - Error correcting code (ECC) and Chipkill technologies maintain system data integrity and help prevent the failure of the memory array even in the event of a failure of a memory chip on a DIMM.
 - Spare Bank, an optional feature, enables the designation of one memory bank (four DIMMs) as spare memory, with the other two banks as system memory. If an active bank of memory has reached a pre-defined ECC error threshold the chipset will copy data to the spare bank that will become active system memory. This is performed real time, transparent to OS and applications and without server shutdown to help ensure data availability and protection.

Expansion Slots

-
- Hot-pluggable: 6 x 64-bit/100MHz PCI-X (supports 3V or Universal PCI Adapters); Legacy: 1 x 32-bit/33MHz PCI (supports 5V or Universal PCI Adapters)

Drive Controllers

- Embedded Adaptec® AIC-7899 dual channel Ultra3 (Ultra160)/LVD SCSI for one of the fastest high-performance SCSI technologies available
- Embedded Adaptec AIC-7890 single channel Ultra-2/LVD SCSI controller dedicated to internal tape devices

RAID Controllers

- Integrated PowerEdge Expandable RAID Controller, Version 3, Dual Channel (PERC 3/Di) with up to 128MB battery-backed cache (Optional RAID Enabler Kit)
- -Provides RAID levels 0, 1, 5, and 10
- -Dual channels gives high degree of flexibility - duplex drives in the main drive bay, duplex the drives in the media bay and main drive bay, have one channel internal and one routed external, or route both externally and connect them to external storage
- Optional PowerEdge Expandable RAID Controller, Version 3, Dual Channel (PERC 3/DC)
- Optional PowerEdge Expandable RAID Controller, Version 3, Quad Channel (PERC 3/QC)

Drive Bays

- Hot-pluggable hard drive bays: eight 1.0" hard drive bays
- Peripheral bays: Three 5.25" half height bays - one occupied by combination CD/DVD-ROM/floppy; two available for tape drives or 2x1" hot-pluggable hard drives
- Up to 24X max IDE CD-ROM or DVD standard
- Standard 3.5" 1.44MB diskette drive

Hard Drives

- 18GB¹, 36GB, 73GB, and 146GB (1") 15,000 RPM Hot Plug Ultra3 (Ultra160) SCSI hard drives
- 18GB¹, 36GB, 73GB, and 146GB (1") 10,000 RPM Hot Plug Ultra3 (Ultra160) SCSI hard drives
- 18GB, 36GB, 73GB, 146GB fibre channel (10,000 rpm) hard drives (external only)

Maximum Internal Storage

- 1460GB Maximum SCSI HDD Storage Capacity (10 x 146GB)

External Storage Options

- Optional PowerVault™ 2xxS SCSI external storage system
- Optional PowerVault 660F and 224F fibre channel RAID system
- Optional Fibre Channel Host Bus Adapter (Optical or Copper)
- PowerVault SAN 4.06 support
- Dell / EMC Support

Tape Backup Options

Optional internal and external drives available:

- PowerVault 110T DLT VS80 tape drive (40GB/80GB)
- PowerVault 110T DLT1 Tape Drive (40GB/80GB)
- PowerVault 110T SDLT Tape Drive (110GB/220GB)
- PowerVault 110T LTO Tape Drive (100GB/200GB)
- PowerVault 120T DDS4 Autoloader (160GB/320GB)
- PowerVault 122T DLT VS 80 Tape Autoloader (320GB/640GB)
- PowerVault 128T LTO Autoloader (2TB/4TB)
- PowerVault 128T SDLT Autoloader (2.2TB/4.4TB)

- PowerVault 136T LTO Tape Library (7.2TB/14.4TB)
- PowerVault 136T SDLT Tape Library (6.6TB/13.2TB)

Communications

-
- Embedded Broadcom Gigabit NIC and Intel 10/100 NIC to preserve valuable PCI slots.
 - Embedded NICs support PXE and teaming functions like fail over and load balancing.
 - Intel PRO/100+ Dual-Port Server Adapter
 - Intel PRO/100S Server Adapter (with IP SEC Encryption)
 - Broadcom® NetXtreme 10/100/1000 (Cat-5 Copper Cabling)
 - Intel PRO/1000 XT
 - Intel PRO/1000 F
 - 56K² modem (internal or external)

Input Devices

-
- Standard Windows keyboard
 - Deluxe Windows keyboard
 - Dell PS/2-style mouse

Ports

-
- 2 USB, 2 PS/2, 1 video, 1 parallel, 2 serial, 2 SCSI, and 2 RJ-45 ports

Power

-
- Standard Three 300 Watt Non-Redundant supply
 - Optional a fourth 300W power supplies for DC redundancy
 - Standard embedded AC switch provides AC power input redundancy (dual power cords can run on separate power outlets)

Chassis

-
- Tower Configuration: 17.5" (44.45cm) H x 12.26" (31.14cm) W x 27.59" (70.08cm) D
 - Rack (6U) Configuration: 10.8" (27.43cm) H x 18.9" (48.01cm) W x 27.59" (70.08cm) D
 - Weight 115 lb.

Graphics

-
- Integrated ATI-Rage XL controller w/ 8MB of SDRAM (not upgradeable)

Management

-
- Active ID and LCD screen monitor the health of the system and help diagnose component failures
 - Fault monitoring of voltage, fan, and thermal conditions to help ensure notification in case of potential problems
 - Tracks memory errors that have been corrected by the ECC memory
 - Automatic Server Recovery will reboot and restart the server if the OS hangs without user intervention
 - Email or paging through Dell OpenManage™ keeps administrators informed of potential server problems before they become critical
 - Asset management features enable customers to inventory server configuration, CPU, memory and disk information, helping keep track of systems and keep them up-to-date
 - User definable OS thresholds can be set, allowing administrators to tune systems and help reduce bottlenecks to performance

Dell OpenManage Server Setup CD included with every server to get your PowerEdge up, running, and contributing to your infrastructure quickly

Software

Optional Software

- Microsoft® Windows® Server 2003 Standard Edition
- Novell® NetWare® Version 5.1 and 6.0
- Microsoft® BackOffice Small Business Server 2000
- Microsoft® Windows NT® Server, Version 4.0
- Microsoft Windows® 2000 Server and Advanced Server
- Red Hat® Linux 8.0, 9.0
- Dell Tape Backup Software by Veritas® Backup Exec™ and Computer Associates® ARCserve®
- More Software Options

Environmental and Regulatory

Environmental

- Operating Temperature: 10° C to 35° C (50° F to 95° F)
- Storage Temperature: -40° C to 70° C (-40° F to 158° F)
- Operating Relative Humidity: 80% (non-condensing at 40°C [104°F])
- Storage Relative Humidity: 5% to 95% (non-condensing at 55°C [131°F])
- Operating Maximum Vibration: Bottom only tested (negative z-axis) at 0.25 G (sinusoidal wave) 0-Peak, at a sweep of 3 to 200 Hz at 0.5 octave per minute
- Storage Maximum Vibration: All six sides tested (positive and negative x, y, and z axes) at 0.5 G (sinusoidal wave) 0-Peak, at a sweep of 3 to 200 Hz at 0.5 octave per minute
- Operating Maximum Shock: Bottom only tested (negative z-axis) at half-sine wave shock pulse of 31 G for up to 2.6 milliseconds (ms)
- Storage Maximum Shock: All six sides tested (positive and negative x, y, and z axes) half-sine wave at 71 G for up to 2 ms. All six sides tested (positive and negative x, y, and z axes) 15 G faired square wave pulse with velocity change at 175 inches/second (445 centimeters/second) or greater
- Operating Altitude: -15.2 to 3,048 m (-50 to 10,000 ft)
- Storage Altitude: -15.2 to 10,668 m (-50 to 35,000 ft)

Regulatory

- FCC (U.S. only) Class A
- DOC (Canada) Class A
- CE EN 55022, IEC 801-2, EN50082-1, ICE 801-3, ICE801-4
- VCCI Class II
- UL 1950
- CSA 950
- EN 60950
- IEC 60950
- CE

Dell OptiPlex GX260



The Dell™ OptiPlex™ GX260 is a highly scalable desktop, spanning the needs of corporate and institutional users in various environments ranging from value to performance. Where obsolescence protection and optimal price performance are critical, the GX260 offers the latest stable technologies in highly serviceable chassis. The GX260 is designed for those users who have come to rely on the stability and manageability of OptiPlex desktops in order to maintain low total cost of ownership.



Tomorrow's technologies today

The OptiPlex GX260 will allow organizations to get the full benefit of tomorrow's technologies today without paying a high price. Large companies and institutions can transition to the next generation Intel® Pentium® processors and utilize technologies such as Gigabit networking and USB 2.0, in order to support future computing needs, protect their investment and help reduce the total cost of ownership.

Networking

The GX260 introduces Intel Gigabit networking¹ to the desktop. Gigabit provides improved networking performance over 10/100 with increased network throughput. GX260 Gigabit networking optimizes the end users flexibility and provides obsolescence protection. Gigabit is backwards compatible with 10/100 and can be used with existing CAT-5 network cabling. Benefits include rapid recovery model for reduced down time, faster backups enabling data-to-server backups and imaging over the network for greater IT productivity, all helping to lower TCO.

As part of Gigabit networking, the GX260 will also incorporate a new standards based alerting feature, Alert Standard Format (ASF). ASF is a new standard for OS absent alerting, replacing existing proprietary interfaces with a single common alerting interface. Regardless of OS state, power off, sleep mode etc, notification of error conditions can be provided to the IT administrator.

Scalability...

The GX260 is available in three chassis sizes and supports Celeron® and Intel Pentium 4 processors. Regardless of chassis or processor, the GX260 can be easily deployed with a common software image in a mix of legacy-full, reduced or legacy-free options with LegacySelect 2.0. GX260 can be configured with a broad range of peripherals including multiple graphics cards, RMSD devices and up to 1GB memory.

Superior performance

GX260 offers Intel Pentium 4 processors with 400MHz and next generation 533MHz front side bus as well as DDR SDRAM, maximizing bandwidth and helping improve overall system performance. In addition, the GX260 now supports USB 2.0 for external peripheral performance boost. New integrated Intel Extreme® Graphics deliver excellent price/performance for basic computing with the option to configure with higher-end performance graphics cards.

Simplified desktop manageability...

OptiPlex continues to drive management standardization with CIM-based solutions that enable management of a broader range of devices across the enterprise. OpenManage Client Instrumentation (OMCI) v7.0 now also includes a 1:1 client management console.

Also new is OpenManage Client Administrator (OMCA) v1.0., a leveraged co-development in partnership with Altiris. This is an optional integrated software management suite for remote image deployment, software delivery and system migrations as well as inventory management.

Service and support

The OptiPlex GX260 comes with 3 years Next Business Day On-site² service as standard.

Easy as **DELL**™

Visit www.dell.com for more information.

Dell OptiPlex GX260

SYSTEM

Processors	Intel® Pentium® 4 and Celeron® processors, Intel B456 chipset with 400 or 533MHz front side bus (depending on processor) and 128/256/512K (depending on processor) L2 (LL2) at full processor speed (Advanced Transfer Cache)
Memory	2 DIMM slots; 128MB shared ¹ non-EEC DDR SDRAM as standard; 1GB - max using 128MB, 256MB, 512MB modules
Flash BIOS	4MB Flash memory for system BIOS, set-up, Plug-and-Play, DMI 2.0s and SMBIOS 2.3.1 support
Video Graphics Controller	Integrated Intel Extreme graphics* or 4X AGP
Graphics Cards	DVI add-in card (can only be used with integrated graphics); 32MB ATI® Radeon™ VE multi-monitor (VGA or DVI); 32MB ATI® Radeon™ 7500
Hard Drives	Enhanced IDE SMART II ATA/100; 20GB/5,400rpm, 20GB/7,200RPM; 40GB/7,200RPM, 80GB/7,200RPM
EIDE Controller	Integrated PCI dual channel ATA/100 and PIO mode 4 support, Bus Master EIDE hard drive controller integrated floppy diskette drive support
Network Controller	Integrated Intel Pro1000 MT Network Interface PCI Token Ring network adapter card (SD and SMT chassis only) 3COM 10/100 PCI with Wake-Up On LAN (WuOL) Network Interface Adaptor
Audio	Integrated AC97 audio Creative Labs SoundBlaster® Live! PCI digital audio card which includes: external connections for microphone, stereo I/O for amplified speakers, internal TAPI connector for telephony modem support
Standard I/O Ports	USB 2.0 (6), serial (1), 2nd port available via add-in card, parallel, PS/2 keyboard, PS/2 mouse, RJ-45, external VGA Stereo line-in (mini-jack), microphone-in (mini-jack), speakers/headphone-out (mini-jack) and headphone (mini-jack, front)

CHASSIS

Small Form Factor - SF	3.57" H x 12.54" W x 13.93 D; one 3.5" x 1" internal hard drive bay; one 5.25" slimline peripheral bay; one 3.5" slimline FDD bay; one low profile PCI expansion slot; one low profile AGP slot; 180 Watts power supply
Small Desktop - SD	4.25" H x 15.37" W x 16.97 D; one 3.5" x 1" internal hard drive bay; one 5.25" peripheral bay; one 3.5" FDD bay; two half-length PCI expansion slots; one low profile AGP slot; 180 Watts power supply
Small Mini Tower - SMT	16.75" H x 7.13" W x 17.61 D; two 3.5" x 1" internal hard drive bays; two 5.25" peripheral bays; two 1.44MB FDD bays; three PCI expansion slots (up to 11"); one PCI expansion slot (up to 9"); one AGP slot (up to 9"); 250 Watts power supply

PERIPHERALS

Monitors	Flat Panel LCD Displays: Dell 190DFP 19" (19" V.I.S.) Digital/Analog; Dell 1702FP 17" (17" V.I.S.) Digital/Analog; Dell 1503FP 15" (15" V.I.S.) Digital/Analog; Dell E151FP 15" (15" V.I.S.) Analog Performance Monitors: Dell P1130 21" (19.8" V.I.S.) UltraScan® Monitor; Dell P992 19" (17.9" V.I.S.) UltraScan Monitor; Dell P793 17" (16" V.I.S.) UltraScan Monitor Mainstream Monitor: Dell M991 19" (18" V.I.S.) Value Monitors: Dell E771P 17" (16" V.I.S.); Dell E551 15" (13.8" V.I.S.)
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STORAGE DEVICES

SF Chassis	1.44MB slimline FDD; CD-ROM slimline; CD-RW (CD-Read/Write) slimline; DVD-ROM slimline
SD and SMT Chassis	1.44MB FDD; CD-ROM; CD-RW; DVD-ROM; DVD/CD-RW combo; 250MB zip drive

SOFTWARE

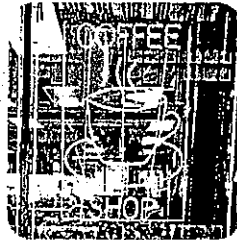
Keyboard	Enhanced QuietKey™, PS/2, 3-user programmable hot keys Performance keyboard-USB 7-user programmable hot keys
Mouse	Dell Logitech PS/2 2-button wheel mouse Microsoft Intellimouse PS/2 2-button wheel mouse Dell/Logitech 2-button USB optical wheel mouse
Speakers	Internal Dell business audio speaker harman/kardon® HK 206 external speakers; harman/kardon HK 395 external speakers
Modem	56K*, PCI v.92** internal controller-less Data/Fax modem
Operating Systems	Microsoft® Windows® 2000 Professional; Microsoft Windows XP Professional and Home
Office Application Suites	Microsoft Office XP
Management Tools	Dell OpenManage™ IT Assistant; Dell OpenManage Client Administrator; LegacySelect 2.0 (control of I/O ports)
Manageability Features	Desktop Management Interface (DMI); 2.0s, CIM, WBEM, Wired for Management (WfM) 2.0, SNMP, SM BIOS 2.3, APM Advanced Control and Power Interface 1.0 (ACPI), DDC2b; Multiple Remote-Boot; Protocol Supported
Key Support Features	Remote System Alerts, S3 sleep state support, Remote BIOS flash, Remote BIOS configuration, Remote Wake up capable, DMI information export to SMS, DIMM Pre-Failure Alert, Asset Tag, Property Ownership Tag, Chassis Intrusion Alert, DMI Configuration Change Alert, Enhanced SMART II HDD Alerts
Standard	Next Business Day On-site - 3 Years ³

SERVICE & SUPPORT



Dell PCs use genuine Microsoft® Windows®. www.microsoft.com/genuine/windows
Pricing, specifications, availability, and terms of offer may change without notice. Taxes and shipping charges extra, and vary. Cannot be combined with other offers or discounts (if any). *May be combined with other select offers or discounts** as applicable. Dell cannot be responsible for errors in typography or photography.
1. To take advantage of Gigabit Ethernet, the GX260 must be connected to a Gigabit Ethernet Server and network infrastructure.
2. Service may be provided by third party. Technician will be dispatched if necessary following phone-based troubleshooting. To receive next business day service, Dell must notify the service provider before 5pm (depending on service contract) customer time. Availability varies.
3. Up to 4GB of system memory may be allocated to support integrated graphics.
4. For hard drives, GB means 1 billion bytes; total accessible capacity varies depending on operating environment.
5. Download speeds limited to 5Mbps. Upload speeds are less (in the 30Mbps range) and vary by modem manufacturer. Speeds also vary depending on line conditions, analog phone line and compatible server equipment required.
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55_001_02760_06/1001



hp LaserJet 4200 series printers

4200 • 4200n • 4200tn • 4200dtn
4200dtns • 4200dtnsl

Increase your small office or workgroup productivity by using the high-performance HP LaserJet 4200 series printers. Use any printer in the series to print even your largest volume jobs quickly with print speeds of 35 ppm. Customize the printer to fit the ever-changing needs of your workgroup by adding networking and a variety of paper-handling and finishing accessories.

versatile

- flexible paper handling reduces user intervention—customizable options allow up to a 2,600-sheet input capacity, a duplexer for two-sided printing, or a 500-sheet stacker or stapler/stacker as your paper-handling needs grow
- print on the media you need to run your business—supports a wide range of media sizes for businesses including letter, legal, and custom sizes
- powerful workgroup solution—share fast, reliable printing with the available hp jetdirect 615n Fast Ethernet internal EIO print server, with 4.5 MB/sec network throughput and best-in-class security features; the optional EIO interface can also be used with many partner solutions within virtually all network environments

easy to use

- save time with remote management—an embedded Web server (optional on 4200 model) provides direct access to the printer on the network and allows full control to remotely configure device settings and e-mail alerts, monitor status, and diagnose device problems
- intuitive technology makes troubleshooting quick and easy—four-line graphical control panel with Help features makes problem resolution easy and fast
- simple operation and paper loading—paper-size sensors and easy-to-load trays without troublesome corner tabs make adding and changing media effortless

performance

- fast printing increases office productivity—maximize efficiency with ultra-fast printing at 35 ppm for letter-sized documents
- get quick return to application and fast printing of complex documents—powerful printing with no slowdowns using the 300 MHz processor and 48 MB RAM (64 MB RAM in bundles)
- printing delivered when you need it—no warm-up time with an instant-on fuser that prints first page out in under 9 seconds
- deliver business-quality documents at full speed—even at the printer's fastest speed, you can print sharp, clear documents using the best print quality of 1200 dpi

HP printing and imaging systems help you create powerful, professional communications easily. Printers, supplies, accessories, and services are designed together to work together to meet your business needs.

hp LaserJet 4200 series printers

hp 4200dn shown

300-sheet output capacity
(250-sheet face down,
50-sheet face up)

4-line graphical
control panel for
ease-of-use, supplies
maintenance
and convenience

two flexible EIO
interfaces can also
be used with many
partner solutions
within virtually all
network environments

share fast, reliable
printing with
the available
hp jeldirect 615n
EIO print server

easy-to-load trays
make media
changing effortless

supports a wide range of
media sizes including letter,
legal and custom sizes

two-sided printing
with automatic
duplex unit

12,000-page print
cartridge for lower
user intervention

optional 1,500-
sheet input tray
for a maximum
input capacity of
2,000 sheets

series highlights

- ultra-fast black and white printing—35 ppm for letter-size documents
- immediate, high-quality printing—first page out in under 9 seconds with up to 1200 dpi resolution
- robust processing handles the most complex documents—all printers come with a 300 MHz processor and 48 MB RAM (64 MB RAM in bundles)
- increases workgroup productivity—share fast, reliable networking via hp jeldirect 615n Fast Ethernet internal EIO print server (optional on 4200 model)
- easy media handling—with paper-size sensors and easy-to-load trays
- customizable options—add additional media trays and networking features, or for additional flexibility consider a 500-sheet stacker or a 500-sheet stapler/stacker

hp LaserJet 4200 series at a glance

hp LaserJet 4200 printer

- 48 MB RAM
- 300 MHz processor
- two flexible EIO interface slots
- 100-sheet multipurpose input tray
- 500-sheet input tray (media capacity 600 sheets)
- 50-sheet face up output tray
- 250-sheet face down output tray
- 12,000-sheet Ultraprecise print cartridge

optional accessories

- 500-sheet input paper tray
- 1,500-sheet input paper tray
- auto-duplex unit
- hp jeldirect 615n Fast Ethernet internal EIO print server
- additional RAM—up to 416 MB total
- 75-sheet envelope feeder
- 500-sheet stacker
- 500-sheet stapler/stacker
- printer stand with storage cabinet

hp LaserJet 4200n printer

all of the features of the 4200 model plus

- 16 MB additional RAM (64 MB total)
- hp jeldirect 615n internal EIO print server
- embedded Web server

hp LaserJet 4200m printer

all of the features of the 4200n model plus

- additional 500-sheet input paper tray (input capacity 1,100 sheets)

hp LaserJet 4200dn printer

all of the features of the 4200n model plus

- auto-duplex unit

hp LaserJet 4200dtns printer

all of the features of the 4200dn model plus

- 500-sheet stacker

hp LaserJet 4200dtnsl printer

all of the features of the 4200dn model plus

- 500-sheet stapler/stacker

intelligent printing for maximum productivity

setting the standard for laser printing

When you think of fast, reliable laser printing for your business or workgroup, the HP LaserJet 4200 series is the benchmark printer that sets the standard for the printing industry. Capitalizing on our legendary imaging heritage, these workgroup printers offer reliable printing, excellent print speeds, advanced networking features, and brilliant print quality to allow your office to work at peak efficiency.

For best-in-class quality, reliability, manageability, and performance, HP is the only choice—*PC Magazine* gives "A" ratings to HP year after year.

the hp supplies advantage

We design our media and LaserJet cartridges to work together with HP printers, so you're guaranteed the award-winning results that only come from Hewlett-Packard. HP designs its print cartridges to produce extraordinarily high-quality results that provide the clarity needed for halftone images, smooth greyscale, and fine details. And by using HP cartridges with Smart Technology, you're ensured consistent print quality from start to finish of the cartridge—no shaking needed. That's because the HP Smart Print supplies system is activated every time you put an HP Smart Print Cartridge into your HP LaserJet. Each HP print cartridge printer features its own smart chip that helps measure and report toner levels, and provides usage information. The HP cartridge and printer are designed to work together—allowing you to monitor your current supplies, order new supplies, and print successfully every time.

award-winning support from hp

HP provides you with a variety of support options to assist you in the setup and maintenance of the HP LaserJet 4200 printer. Use HP's expert knowledge to help you make the most of your printer and ensure your equipment is running at peak efficiency. Start with a one-year, return-to-HP, limited warranty, backed by free telephone support from the award-winning HP Customer Care. To further guarantee trouble-free operation, to maximize the potential of your HP LaserJet printer, and to customize the printer for your unique business profile, consider upgrading service and support options such as installation, network installation, advanced maintenance, and post-warranty support.

maximize your IT investment

HP offers a comprehensive set of services and acquisition options that provide predictable cost structures and business efficiency gains—financing, user training, deployment strategies, regularly scheduled supplies and printer maintenance, and complete hardcopy environment management are available through HP Consulting, HP Outsourcing, HP Support, HP Education, and HP Finance. To find out more information go to the HP Services website at www.hp.com/hps

maximize your office productivity with versatile accessories from hp



Q2440A (500-sheet)
Q2444A (1,500-sheet)

500 and 1,500-sheet paper trays for up to 2,600-sheet input capacity



Q2439A

two-sided printing with auto-duplex unit saves paper



Q2442A

500-sheet stacker reduces user intervention



Q2443A

500-sheet stapler/stacker produces finished documents



Q2438A

75-sheet envelope feeder makes business mailing simple and efficient



Q2445A

printer stand with storage cabinet for a small office footprint



J6057A

fast, simple networking with hp jetdirect 615n Fast Ethernet print server

these accessories work with either your hp LaserJet 4200 or 4300 printer series for added versatility



Legendary Reliability™

APC Smart-UPS 1000VA USB 230V
Part Number : SUA1000I

Product Overview

Description APC Smart-UPS, 1000VA/670W, Input 230V/ Output 230V, Interface Port DB-9 RS-232, SmartSlot, USB

General Features Advanced Battery Monitoring, Audible Alarms, Auto Diagnostic Testing, Automatic Voltage Regulation (AVR), Brownout correction, Hot Swap Batteries, Intelligent Battery Management, Lightning and Surge Protection, Line-interactive, Load Meter, Network-grade line conditioning, Overload Indicator, Pager notification, Programmable power event response, QuickSwap, Replace Batt Indicator, Sine-wave output, SmartSlot, Software, Status Indicator LED's, User Replaceable batteries, USB compatible, CellGuard

Includes CD with software, Smart UPS signalling RS-232 cable, User Manual, USB cable

Includes

Management software included [PowerChute Smart-UPS Bundle](#)


Options

Optional Management Device [Click here to view optional Management Devices.](#)

Optional AC Connection [Click here to view optional AC Connections.](#)

Optional New Service [Click here to view other New Services.](#)

Documentation

User Manual & Installation Guides  [Smart-UPS - 1000/1500 and 750/1000XLI User Manual](#)

Communications & Management

Interface port DB-9 RS-232 , SmartSlot , USB

Available Smart Slot Interface Quantity 1

Control panel LED status display with load and battery bar-graphs and On Line : On Battery : Replace Battery : and Overload Indicators

Audible alarm Alarm when on battery : distinctive low battery alarm : configurable delays

Emergency Power Off (EPO) Optional

Output

Output power capacity 1,000 VA

Output power capacity 670 Watts

Nominal output voltage 230 V

Output Voltage Note Configurable for 220 : 230 or 240 nominal output voltage

Waveform type Sinewave

Output Connections (8)IEC 320 C13
(2)IEC Jumpers



Input

Nominal input voltage 230 V

Input frequency 50/60 Hz +/- 3 Hz (auto sensing)

Input Connection Type IEC-320 C14

Cord Length 6 feet

Input voltage range for main operations 160 - 286 V

Input voltage adjustable range for main operations 151 - 302 V

Surge Protection and Filtering

Surge energy rating 320 joules

Filtering Full time multi-pole noise filtering : 0.3% IEEE surge let-through : zero clamping response time : meets UL 1449

Runtime

Typical backup time at half load 20.6 minutes (335 Watts)

Typical backup time at full load 6.1 minutes (670 Watts)

Runtime Chart [Smart-UPS](#)

Batteries

Battery type Maintenance-free sealed Lead-Acid battery with suspended electrolyte : leakproof

Typical recharge time ** 3 hour(s)

Replacement battery cartridge (1) RBC6

Extended run options for APC Smart-UPS 1000VA USB 230V

Liquid Electrolyte Value 0.0

Physical

Maximum height dimensions 8.50 inches (21.59 cm)

Maximum width dimensions 6.70 inches (17.02 cm)

Maximum depth dimensions 17.30 inches (43.94 cm)

Net weight 41.50 lbs (18.86 kg)

Shipping Weight 46.00 lbs (20.91 kg)

Shipping Height 15.00 inches (38.10 cm)

Shipping Width 13.00 inches (33.02 cm)

Shipping Depth 23.00 inches (58.42 cm)

Color Black

Units per Pallet 24.0

Environmental

Operating Environment 0 - 40 °C (32 - 104°F)

Operating Relative Humidity 0 - 95%

Humidity

Operating Elevation 0-10000 feet (0-3000 m)

Storage Temperature -15 - 45 °C (5 - 113°F)

Storage Relative Humidity 0 - 95%

Storage Elevation 0-50000 feet (0-15000 m)

Audible noise at 1 meter from surface of unit 41 dBA

Online thermal dissipation 100 BTU/hr

Conformance

Approvals C-tick, CE, EN 50091-1, EN 50091-2, GOST, PCBC, VDE

Standard warranty 2 years repair or replace , optional on-site warranties available , optional extended warranties available

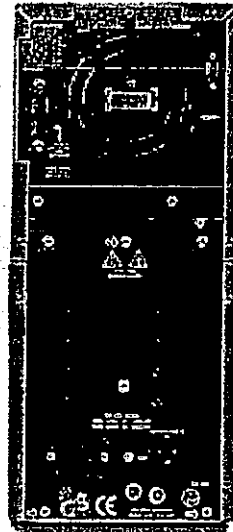
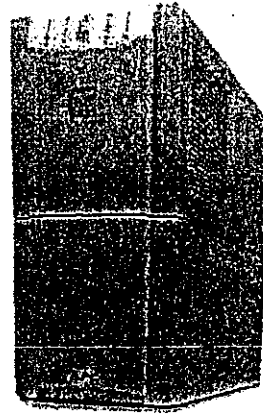
** The time to recharge to 90% of full battery capacity following a discharge to shutdown using a load rated for 1/2 the full load rating of the UPS.

Smart-UPS 2200

Part Number : SU2200INET

Estimated Retail Price : 650.02 GBP *

Availability : Latin America , Eastern Europe : Middle
East : Africa , Western Europe , China , India , Asia :
Australia : South Pacific



Product Overview

Description	APC Smart-UPS, 2200VA/1600W, Input 230V/ Output 230V
General Features	Hot Swap Batteries , Intelligent Battery Management , Overload Indicator , Replace Batt Indicator , SmartSlot , Software , Automatic Voltage Regulation (AVR) , User Replaceable batteries
Includes	User Manual , Smart UPS signalling RS-232 cable , CD with software
Documentation	User Manual

Technical Specifications

Output

Rated Power	2,200 VA
Output power capacity	1,600 Watts
Nominal output voltage	230 V
Output Voltage Note	Configurable for 220 : 230 or 240 nominal output voltage

Output Connections	(8)IEC 320 C13
	(1)IEC 320 C19



Waveform type	Sinewave
---------------	----------

Input

Nominal input voltage	230 V
Input frequency	50/60 Hz +/- 3 Hz (auto sensing)
Input Connection Type	IEC-320 C20 Schuko CEE 7 / EU1-16P British BS1363A
Input voltage range for main operations	174 - 286 V
Input voltage adjustable range for main operations	168 - 302 V

Batteries

Typical backup time at half load	32.3 minutes
Battery type	Maintenance-free sealed Lead-Acid battery with suspended electrolyte : leakproof

Typical recharge time 3 hour(s)

Replacement battery cartridge (1) [RBC11](#)

Communications & Management

Interface port DB-9 RS-232, Smart-Slot card

Smart Slot Interface Quantity 1

Management software included [PowerChute Smart-UPS Bundle](#)

Optional Software [Click here to view other Software options .](#)

Control panel LED status display with load and battery bar-graphs and On Line : On Battery : Replace Battery : and Overload Indicators

Audible alarm Alarm when on battery : distinctive low battery alarm : configurable delays

Emergency Power Off (EPO) Optional

Optional Management Device [Click here to view optional Management Devices.](#)

Surge Protection and Filtering

Surge energy rating 480 Joules

Filtering Full time multi-pole noise filtering : 0.3% IEEE surge let-through : zero clamping response time : meets UL 1449

Physical

Maximum height dimensions 17.00 inches (43.18 cm)

Maximum width dimensions 7.70 inches (19.56 cm)

Maximum depth dimensions 21.50 inches (54.61 cm)

Net weight 112.00 lbs (50.91 kg)

Shipping weight 134.00 lbs (60.91 kg)

Shipping Height 22.00 inches (55.88 cm)

Shipping Width 15.00 inches (38.10 cm)

Shipping Depth 30.00 inches (76.20 cm)

Color Beige

Pallette Units 3.0

Environmental

Operating Temperature 0 - 40 °C (32 - 104°F)

Operating Relative Humidity 0 - 95%

Operating Elevation 0-10000 feet (0-3000 m)

Storage Temperature -15 - 45 °C (5 - 113°F)

Storage Relative Humidity 0 - 95%

Storage Elevation 0-50000 feet (0-15000 m)

Audible noise at 1 meter
from surface of unit 45 dBA

Online thermal dissipation 275 BTU/hr

Conformance

Approvals C-tick, CE, EN50091-1, EN50091-2, GOST, PCBC, VDE

Standard warranty 2 years repair or replace , optional on-site warranties available , optional extended warranties available

Cisco 3600 1-Port Fast Ethernet 2-Port Channelized E1/ISDN-PRI Unbalanced

Details This module provides a single Auto-Sensing 10/100BaseTX connection, via an RJ-45 connector and two channelized E1/ISDN PRI unbalanced 75-ohm connections via DB-15 connectors.

Product Features

- NO reliance on other Network modules, WAN Interface cards, voice, Interface cards, or Advanced integration modules

System and other Requirements

- Cisco 3620 or 3640 Router.
- Supported platforms & minimum IOS versions:
 - 3640 - 11.34T1
 - 3620 - 11.34T1
 - 2600 Series - not available
 - 1720 - not available.
 - 1600 Series - not available

Warranty

- Standard Warranty: 90 days

Product Technical Specifications

Features

- Network Port(S): 10/100Base-TX (RJ-45) AutoSensing

Catalyst 2950 24-Port 10/100 Switch + 2 100BASE-FX Uplinks

Summary Service Category 3.

Details 2950C-24 has 24 10/100 Ports with 2 fixed 100BASEFX Uplink Ports(MT-RJ)

Product Features

- Wire-Speed, nonblocking performance on all Ports, including Gigabit Ports
- 802.1Q Standards-based VLAN trunking on each Port
- 64 VLANS Per Switch with 64 instances of spanning tree (PVST+)
- Fastetherchannel
- Superior multicast management via support for IGMP snooping in Hardware
- 100BASEFX Ports: MT-RJ connectors, 50/125 or 62.5/125 Micron Multi-mode Fiber-optic cabling
- 8.8-GBPS switching fabric
- 16 MB DRAM and 8 MB flash memory
- 8,000 Mac addresses

Product physical Dimensions

- Length: 17.5 inches
- Width/Depth: 9.52 inches
- Height: 1.72 inches

Warranty

- Standard Warranty: Lifetime
- Comments: Limited lifetime Warranty
- Fan and power supply Warranty is limited to five (5) years
- First 90 days, next business Day Replacement
- After that, it is a 10 Day Replacement

Product Technical Specifications

Hardware

- Device Type: Network Switch
- Input Voltage: 110V & 220V
- Power supply capacity (watts): 30
- 19" rackmount Hardware? Yes

Management

- SNMP Manageable? Yes
- Console Port: RJ-45

Catalyst 2948G 48-Port 10/100 (autosensing, RJ-45) 2 1000X slots

Brand Cisco Systems - Switches and Hubs

Summary Service Category 8.

- Details
- 48 autosensing switched 10BaseT/100BaseTX ports.
 - 2 1000BASEX ports which require a GBIC per port.
 - 24-Gigabits-per-second (GBPS) data switching
 - Backplane
 - Virtual LAN (VLAN) support, up to 1000 VLANS.
 - Support for 802.1P, 802.1Q, and VTP on all ports.
 - Simple network management protocol (SNMP) and TelNet interface support.
 - Built-in http server.
 - Four groups of embedded RMON (history, statistics, alarms, and events).
 - 19-Inch rack-mountable.
 - The system can switch over 17.8 million packets per second
 - 16000 active Mac addresses
 - Bandwidth aggregation through fast etherchannel technology supported on all ports.
 - 150-MHz R5000 RISC
 - 64MB Of DRAM
 - 12MB Of flash

Warranty

- Standard warranty: 90 days

Product technical specifications

Hardware

- Device type: Network switch
- Input voltage: 110V & 220V
- Power supply capacity (watts): 120
- 19" rackmount hardware? Yes

Connections

- LAN port type(S): 10/100Base-TX (RJ-45) autosensing 1000BX

Management

- SNMP manageable? Yes
- Console port: RJ-45

(3) 研修委託見積書及び関連資料 (写し)

Eastern Africa Statistical Training Centre
Dar es Salaam

Course Title: Training Course for Utilizing Statistical Data of NBS

Location	EASTC (Dar es Salaam)
Number of participants	15
Duration (days)	5

I: From Administration

1. Administrative costs (10%)	689,750.00
2. Accommodation (bed only) 15pp x 5,000/- x 5 days	375,000.00
3. Tea 15pp x 1,500/- x 5 days	112,500.00
5. Tea 15pp x 1,000/- x 5 days	75,000.00
6. Meals & Incidentals 15pp x 30,000/- x 5 days	2,250,000.00
Sub-total (Admin)	2,812,500.00

II: From Computer Unit

1. Computers 15pcs x 2,000/ x 8 hrs x 5days	1,200,000.00
2. 1 Network printer 1 printer x 2,000/- x 8 hrs x 5 days	80,000.00
3. 1 Multimedia projector 1 projector x 2,000/- x 8 hrs x 5 days	80,000.00
4. Course Manual 15pp x 40,000/-	600,000.00
5. 2 Resource Persons 2rp x 25,000/- x 8 hrs x 5 days	2,000,000.00
6. Laboratory supervision/troubleshooting 25,000/- x 5 days	125,000.00
Sub-total (Computer Unit)	4,085,000.00
Sub-total I + Sub-total II	6,897,500.00
Grand Total	7,587,250.00

Cost per participant 505,816.67

Ota Akira - JICA - IT

From: eastc [eastc@ud.co.tz]
Sent: Sunday, August 31, 2003 12:52 PM
To: Dr. A. Otomo, c/o Ota Akira, NBS ITgroup
Subject: Re: Training Course

At 09:00 AM 8/29/2003 +0300, you wrote:

Dear Dr. Otomo,

I acknowledge receipt of your message that suggests that resource persons should be paid an honorarium at the rate of Tshs 15,000/= per hour because they will be coming from NBS. It is difficult for me to do that without having the commitment of NBS that they will be providing the resource persons at that rate. Given that the courses to be run are many, I may consider some discount but not to the extent of 40%!

Vitalis E. Muba
CEO, EASTC.

>Dr. Vitalis E. Muba
>
>Sikamoo, Muze.
>Mimi ni Ota.
>I attached the letter of Dr. Otomo, JICA statistical Consultant, regarding
>the training course.
>Please check it.
>
>-----
>Ota Akira
>National Bureau of Statistics
>P.O.Box 796, DSM, Tanzania
>Tel: 255-22-2122722/3 Ext. 119
>Fax: 255-22-2130852
>Mobile: 255-744-279823
>E-mail: ota_akira@hotmail.com
>

UNIVERSITY COMPUTING CENTRE LIMITED.



P. O. Box 35062,
Dar-Es-Salaam,
Tanzania.
Email: ucc@uudsm.ac.tz

Tel: 255 (22) 2410645
255 (22) 2410500-8 Ext. 2720
Mobile: 0744-782120
Fax: 255 (22) 2410690



Our Ref.: CC-321-CS/cs

Date: Monday, March 31, 2003

UTARATIBU WA MALIPO

UCC inaruhusu washiriki wa kozi kuchagua utaratibu unowafaa katika kulipa ada ya kozi.
Ada inaweza kulipwa yote wakati wa kujiandikisha au kwa kutumia utaratibu ufuatao kwa kila kozi:

Jina la kozi	Ada	Wakati wa kujiandikisha	Jumatatu ya kuanzakozi	Jumatatu ya pili baada ya kuanza kozi	Jumatatu ya tatu baada ya kuanza kozi	Jumatatu ya nne baada ya kuanza kozi	Jumatatu ya tano baada ya kuanza kozi
Microcomputer Application	120,000/=	40,000/=	20,000/=	20,000/=	20,000/=	20,000/=	
Desktop Publishing	150,000/=	50,000/=	25,000/=	25,000/=	25,000/=	25,000/=	
Advanced Microcomputer Application	150,000/=	50,000/=	25,000/=	25,000/=	25,000/=	25,000/=	
Introduction to Web Design and Applications	150,000/=	50,000/=	25,000/=	25,000/=	25,000/=	25,000/=	
Computer Programming	280,000/=	60,000/=	60,000/=	60,000/=	60,000/=	40,000/=	
AutoCAD 14	150,000/=	50,000/=	50,000/=	50,000/=			
Computer Maintenance	182,600/=	60,000/=	60,000/=	62,600/=			
Database Management	280,000/=	60,000/=	60,000/=	60,000/=	60,000/=	40,000/=	
Statistical Packages	150,000/=	50,000/=	25,000/=	25,000/=	25,000/=	25,000/=	

Utawala.

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UNIVERSITY COMPUTING CENTRE

WHY CHOOSE US FOR COMPUTER TRAINING?



We Have Modern Computer Training Facilities



We Have Qualified and Dedicated Staff



We Have a STANDBY GENERATOR



We Offer FREE REFRESHMENTS



We Offer up to 6 hours FREE Practice Every Saturday within your course

THIS IS OUR COURSE SCHEDULE FOR JUNE 2003 - DECEMBER 2003

No	Course Title	Content	Duration	Start Dates	Time	Fee
1	Microcomputer Applications IF YOU WANT TO MOVE WITH TIME	Introduction to Computers DOS and Windows 98 MS Word MS Excel MS Access Internet and E-mail	5 weeks 4 hrs/day	September 15, 2003 September 15, 2003 September 15, 2003	8:00-12:00 8:00-12:00 14:00-18:00	120,000/-
2	Desktop Publishing If you want to make money	Adobe PageMaker 6.52 Adobe PhotoShop 5.0 MS Publisher 98 Corel Draw 7.0/8.0	3 weeks 4 hrs/day	August 18, 2003	14:00-18:00	150,000/-
3	Microcomputer Applications Evening Course For busy people	Introduction to Computers DOS and Windows 98 MS Word MS Excel MS Access Internet and E-mail	7 weeks 2 hrs/day	Sept 22, 2003	18:00 - 20:00	120,000/-
4	ADVANCED MICROCOMPUTER APPLICATIONS Improve YOUR Computer Skills	Advanced Windows Advanced Word Advanced Excel Advanced Access PowerPoint	7 weeks 2 hrs/day	August 18, 2003 September 22, 2003	18:00 - 20:00	150,000/-
5	AutoCAD 14 For Engineers, Architects and Technicians with AMBITION	AutoCAD Basics 2D Drafting Introduction to 3D modeling	4 weeks 2 hrs/day	August 04, 2003	18:00 - 20:00	150,000/-
6	Introduction to Web Design and Applications	HTML 4.0 FrontPage 2000 Dream weaver v.4 Photoshop v.6 Flash v.5	5 weeks 4 hrs/day	Sept 15, 2003	8:00 - 12:00	150,000/-
7	Programming For a serious Future	Programming Concepts Database concepts Visual Basic Borland Delphi	8 weeks 4 hrs/day	Sept 15, 2003	14:00 - 18:00	280,000/-
8	Computer Maintenance KNOW HOW	Diagnosis Repair Preventive Maintenance	4 weeks 4 hrs/day	August 18, 2003	8:00 - 12:00	182,600/-
9	Database Management For Database Administrator	Database Concepts Designing and implementing database with Ms Access 2000. Designing and implementing database with SQL Server 2000.	6 weeks 4 hrs/day	September 15, 2003	19:00 - 15:00	280,000/-
10	Statistical Packages	Intermediate Ms Excel Statistical Package for Social Scientist (SPSS)	5 weeks 2 hrs/day	September 01, 2003	18:00 - 20:00	150,000/-

REGISTER YOURSELF BEFORE THE COURSE START DATE TO AVOID DISAPPOINTMENT



UCC Building
University Road
Mlimani Campus



Tel (022) 2410645



University Computing Centre
P.o. Box 35062
Dar Es Salaam



Fax (022) 2410690

WEBSITE: WWW.UCC.CO.TZ

E-mail: training@udsm.ac.tz



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255 (22) 2410500-8 Ext. 2720
Mobile: 0744-270245
Fax: 255 (22) 2410690



PROFESSIONAL CERTIFICATE IN INTERNETWORKING

The University Computing Centre of the University of Dar Es Salaam invites applications from interested people wishing to pursue a 6 months COURSE in Internetworking due to begin on 17th November, 2003 at its ultramodern premises at the main campus-University of Dar es Salaam.

1. Course Rationale

The Internet hence computer networks are emerging as a revolutionary force in our lives, redefining the way we communicate, work, shop and play. Most companies and organizations in Tanzania today are shaking the bushes to find enough people with the right skills to address the demand. The Cisco course is a timely response to these challenges.

2. Course Objectives

To teach participants how to design, build and maintain computer networks and Management of either Linux or Windows2000 OS.

3. Target Group

People with desire to acquire cutting-edge skills and know-how in Internetworking.

4. Minimum Entry Requirements

To qualify for admission, a candidate must possess A-Level Secondary Education Certificate with at least one principal and two subsidiaries passes or Equivalent Certificate from a recognized institute in any field. In addition candidates are required to have basic knowledge in Computer.

5. Learning Outcome

At the end of this course participants will acquire the academic requirements to sit the Cisco Certified Networking Associate (CCNA) and either Red Hat Certified Engineer (RHCE) or Microsoft Certified Engineer (MCSE) professional exams.

6. Course Content, Timing and Grouping

The Certificate will be offered in TWO Options:

MAJOR AREA	COURSES	COURSE TIMING	CONTENTS
CISCO & LINUX	CCNA PROGRAM RHCE PROGRAM	0800 – 1200HRS Monday to Friday	CCNA:- Semester 1, 2, 3 & 4 Linux:- Background, Installation, Configuration & Administration, Network Services Administration, X Window System Administration and Network Administration
CISCO & WINDOWS2000	CCNA PROGRAM MCSE Core Program	1330 – 1730HRS Monday to Friday	CCNA:- Semester 1, 2, 3 & 4 MCSE Core Program:- Installing Configuring and Administering MS Windows2000 Professional. Installing, Configuring and Administering MS Windows2000 Server. Implementing and Administering MS Windows2000 Network Infrastructure. Implementing and Administering MS Windows2000 Directory Services Infrastructure.

7. Fee

The Total Fee for each option is US\$ 1600.00 only.! This fee covers tuition, courseware and refreshments during the course. The fee can be paid up to THREE Installments.

8. Registration

Interested participants should collect application forms from room G09 at the University Computing Centre-UDSM after paying a non refundable fee of Tshs.5,000/=, Women are encouraged to apply.

Discover the Difference!



UNIVERSITY COMPUTING CENTRE LIMITED.

P. O. Box 35062,
Dar-Es-Salaam,
Tanzania.
Email: ucc@udsm.ac.tz

Tel: 255 (22) 2410645
255 (22) 2410500-8 Ext. 2720
Mobile: 0744-270245
Fax: 255 (22) 2410690



Cisco NETWORKING ACADEMY PROGRAM

The University Computing Centre of the University of Dar Es Salaam invites applications from interested people wishing to pursue a 6 months COURSE. Under the Cisco Networking Academy Program starting on November 17, 2003 at its ultramodern premises at the main Campus University of Dar Es Salaam

1. Course Rationale

The Interested hence computer networks are emerging as a revolutionary force in our lives, redefining the way we communicate, work, shop and play. Most companies and organization in Tanzania today are shaking the bushes of find enough people with the right skills to address the demand. The Cisco Networking course is a timely response to these challenges.

2. Course Objectives

To teach participants how to design, build and maintain computer networks using Cisco Networking Technology.

3. Target Group

People with desire to acquire – edge skills and know – how is networking

4. Entry Requirements

To qualify for admission, a candidate must possess A- Level Secondary Education Certificate with at least one principal and two subsidiaries passes or Equivalent Certificate from a recognized institute in any field. In additional candidates are required to have basic knowledge in Computer.

5. Learning Outcome

At the end of this course participants will acquire the academic requirements to sit the Cisco Certified Networking Associate (CCNA) professional exam.

6. Course Timing and Venues in Brackets

Training will be conducted from 1800 – 200hrs(UCC – Dar) and 0800 – 1200hrs(UCC – Arusha), Monday to Friday

7. Course Content

The course will follow approved Cisco Networking Academy Program

8. Fee

The Total Fee for the whole course is US\$800.00 ONLY. This fee covers tuition, courseware and refreshments during the course. The fee can be paid up to THREE Installments.

For UDSM Students the fee will be USD 400.

9. Registration

Interested participants should collect applications from room G09 (Training Office) at the University Computing Centre – UDSM or Arusha Branch along Namanga Road at Sakina Area after paying a non refundable fee of Tshs 5,000/=

Discover the Difference!

Aptech IT Literacy Drive

Aptech in its continued efforts to promote IT Literacy globally, has taken the initiative in offering the new version of CPISM at an attractively affordable price which will enable the participant to gain the required IT skills to enhance their career prospects.

Certificate of Proficiency in Systems Management - User Level I

Course Contents:

- o Basic Computer Fundamentals
- o Microsoft Word
- o Microsoft Excel
- o Microsoft PowerPoint
- o Database Fundamentals using Access
- o Web Designing
 - HTML
 - DHTML
 - DREAMWEAVER



Salient Features of Aptech:

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- ✓ Total Practical approach
- ✓ Structured Course materials
- ✓ Personalised attention

For further details contact:
Aptech Computer Education
Osman Towers, Ground Floor
Plot no. 12, Zanaki Street
Dar Es Salaam
Ph: 213 7947
Email: aptechanzania@yahoo.com



Course Duration : 3 Months

Assessment
By practical online tests.

Course Award
A Microsoft certificate will be awarded to candidates who successfully pass the tests.

Course Cost
The cost of the course is US\$1475.00

LearnIT

**Microsoft Certified
Systems Engineer**

For further Information Contact :

LearnIT Ltd
1st Floor, Lumumba Complex,
P.O. Box 20032, Dar es Salaam,
Tanzania
Tel.: 2180615, 2180618
Cell : 0741 333870
Fax: 2180623
E-Mail: info@learnit.co.tz

MICSE

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Course Brochure

LearnIT Ltd

Microsoft Certified Systems Engineer (MCSE) 2000 Track

The Microsoft Certified Systems Engineer credential is the premier certification for professionals who analyze the business requirements and design and implement the infrastructure for business solutions based on the Microsoft Windows 2000-platform and Microsoft server software. Implementation responsibilities include installing, configuring, and troubleshooting network systems.

The MCSE Certification is Appropriate for

- Systems engineers
- Technical support engineers
- Systems analysts
- Network analysts
- Technical consultants

The MCSE credential is one of the most widely recognized technical certifications in the industry—a credential in high demand. By earning the premier MCSE credential, individuals are demonstrating that they have the skills necessary to lead organizations in the successful design, implementation, and administration of the most advanced Microsoft Windows platform and Microsoft server products.

An MCSE's Typical Computing Environment: The Windows 2000 track of the MCSE credential is designed for IT professionals working in the typically complex computing environment of medium to large organizations.

An MCSE candidate should have at least one year of experience implementing and administering a network operating system in environments with the following characteristics:

- 200 to 26,000 supported users
- 5 to 150 physical locations
- Typical network services and applications including file and print, database, messaging, proxy server or firewall, dial-in server, desktop management, and Web hosting.
- Connectivity needs including connecting individual offices and users at remote locations to the corporate network and connecting corporate networks to the Internet.

In addition, an MCSE candidate should have at least one year of experience in the following areas:

- Implementing and administering a desktop operating system.
- Designing a network infrastructure.

Requirements for MCSE

MCSE candidates in the Microsoft Windows 2000 track are required to pass five core exams and two elective exams that provide a valid and reliable measure of technical proficiency and expertise in solution design and implementation. (An additional "accelerated" exam is offered for a limited time to individuals who have passed the Microsoft Windows NT 4.0 exams. These exams are developed with the input of professionals in the industry and reflect how Microsoft products are used in organizations throughout the world. The exams are administered by Prometric and VUE, independent-testing organizations with locations worldwide.)

MCSE 2000 Curriculum

Core Units

1. Installing, Configuring, and Administering Microsoft Windows 2000 Professional
2. Installing, Configuring, and Administering Microsoft Windows 2000 Server
3. Implementing and Administering a Microsoft Windows 2000 Network Infrastructure
4. Implementing and Administering a Microsoft Windows 2000 Directory Services Infrastructure
5. Designing a Microsoft Windows 2000 Directory Services Infrastructure

Electives Units:

1. Designing a Microsoft Windows 2000 Network Infrastructure
2. Designing and Implementing Databases with Microsoft SQL Server 2000 Enterprise Edition

Module 6 - Presentation (16 Hours)

- 6.1 Getting Started
- 6.2 Basic Operations
- 6.3 Formatting
- 6.4 Graphics and Charts
- 6.5 Printing and Distribution
- 6.6 Slide Show Effects
- 6.7 View a Slide Show

Module 7 - Information and Communication (8 Hours)

- 7.1 Getting Started
- 7.2 Web Navigation
- 7.3 Web Searching
- 7.4 Bookmarks
- 7.5 Getting Started
- 7.6 Messaging
- 7.7 Addressing
- 7.8 Message Management

Duration : 7 weeks
Timings : 2.5 hours per day (Monday to Friday)
Course Cost : Tshs 250,000.00 only
Examination Fees : USD\$75.00 only for all 7 exams (if only 4 exams are required then the cost would be USD\$50.00 only)

ICIDL

International Computer Driving License

Offered

by

LearnIT

For more information contact :

LearnIT Ltd

1st Floor, 28-31 Lumumba Complex
Mafia/Lumumba Street
P O Box 20032

Dar-es-Salaam, Tanzania

Tel : 2180615 / 8, 0741 333 870

Fax : 2180623

Email : info@learnit.co.tz

1. Introduction

The International Computer Driving Licence (ICDL) certifies that the holder has knowledge of the basic concepts of Information Technology (IT) and is able to use a personal computer and common computer applications at a basic level of competence.

In practice the ICDL certificate indicates that the holder has passed one theoretical test that assesses his or her knowledge of the basic concepts of Information Technology (IT), and six practice-based tests which assess the holder's basic competence in using a personal computer and working with common computer applications.

The International Computer Driving License is an internationally accepted certificate. It can simplify employment procedures and assure the employer that applicants and staff have the necessary level of knowledge and competence to use common computer applications. The ICDL is a certificate of knowledge and proven competence and is based on a single agreed Syllabus.

The ICDL is deployed and monitored by the European Computer Driving Licence Foundation (ECDL-F). The role of the Foundation is to promote and co-ordinate the development of the ICDL concept. The ECDL-F is the guarantor of the ICDL standard and the Foundation ensures that the ICDL is administered in an equitable manner internationally.

1.2 Objectives of the ICDL

- To promote and encourage computer literacy for all
- To raise the level of knowledge about Information Technology (IT) and the level of competence in using personal computers and common computer applications for all citizens internationally
- To ensure all computer users understand best practices and the advantages of using a personal computer
- To increase the productivity of all employees who need to use computers in their work
- To enable better returns from investments in Information Technology (IT)
- To provide a basic qualification which will allow all people, regardless of their background, to be part of the Information Society.

Modules Covered

Module 1 - Basic Concepts of Information Technology (9 Hours)

- 1.1 Getting Started
- 1.2 Hardware
- 1.3 Storage
- 1.4 Software
- 1.5 Information Networks
- 1.6 Computers in Everyday Life
- 1.7 IT and Society
- 1.8 Security, Copyright and the Law

Module 2 - Using the Computer and Managing Files (5 Hours)

- 2.1 Getting Started
- 2.2 Desktop Environment
- 2.3 Organizing Files
- 2.4 Simple Editing
- 2.5 Print Management

Module 3 - Word Processing (17 Hours)

- 3.1 Getting Started
- 3.2 Basic Operations
- 3.3 Formatting
- 3.4 Finishing a Document
- 3.5 Printing
- 3.6 More Advanced Features

Module 4 - Spreadsheets (18 Hours)

- 4.1 Getting Started
- 4.2 Basic Operations
- 4.3 Formulas and Functions
- 4.4 Formatting
- 4.5 Printing
- 4.6 More Advanced Features

Module 5 - Databases/Filtering Systems (11 Hours)

- 5.1 Getting Started
- 5.2 Create a Database
- 5.3 Use of Forms
- 5.4 Retrieve Information
- 5.5 Reporting



Voice and Data Solution
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Ref: FMCL/M/NBS/204/2003
Our tin #: 100-672-774

Monday, May 19, 2003

CLIENT: DIRECTOR GENERAL
NATIONAL BUREAU OF STATISTICS
P.O. BOX 796

ATT: MR. SUKWA

Dear Sir,

REF: REPORT OF FINDING BASING TO THE NEED OF NETWORK
EXPANSION AND REPAIR OF FAULTY NETWORK POINT

Your attention is kindly drawn to the above heading. Last week I (Fadhili Magembe of FM communications LTD) and Mr. Otta of National Bureau of Statistics did physical Survey to all network Points for aim of seeing the possibility of expanding of existing network infrastructure.

Due to this Survey I did, I found faulty Network Points that need repair. Now because my Company was selected to repair and services of telephone system, LAN and WAN, this repair work will be done at the same cost of the offered tender. But Network Points expansion will be done at quoted cost as show on the other pages. The following is a list that shows room ID and in bracket is the total number of Network Points to be repaired

A1- 13 (3) + A1-17 (1) + C1-9 (1) + C1-5 (2) +

Total number of Points is 7

(B) The list below shows rooms in ID form and total number of Network Points in bracket to be added (new network points to be installed)

Bo -1 (1) + Bo -2(2) + C1- 4(1) + Co - 1(5) + Ao - 3 (2) + Do - 3 (1) + Do - 4 (2) + Do 5 (1) + Do -6 (1) + Ao - 2 (1) + Ao-5(4) .A1-2 (2) A1- 5 (1) + A1 - 6 (1) + A1- 8 (2) + A1 - 10 (1) + A1 -16 (1) + A1 - 17 (1)

Total number of new points is 30

Voice and Data Solution

➤ COST AND MATERIAL FOR NEW NETWORK POINTS

➤ 30pcs x Data jacks @ 11,500/=	345,000/=
➤ 2pcs x 16ports D-link 10/100mbps switched Hub @ 305,000/=	610,000/=
➤ 2pcs x 8ports D-link 10/100mbps switched Hub @ 180,000/=	360,000/=
➤ 2boxes x UTP CAT5e Cables @ 180,000/=	360,000/=
➤ accessories 250,000/=	250,000/=
➤ 164pcs x "(25x38)" PCV trunking for all Network points @ 6500/=	1,066,000/=

SUBTOTAL 2,991,000/=

LABOUR CHARGE 300,000/=

GRAND TOTAL 3,291,000/=

SOME REFERENCE CUSTOMERS.

- National Health Insurance fund – HQ.
- National Board of Accountants and Auditor – HQ.
- United States Peace Corps – DSM and Arusha Office.
- Advert International LTD.
- Cost Consult LTD.
- Legal and Human-Rights Centre – HQ.
- National Institutè for Medical research – Mwanza Office.
- Population Services International – HQ (DSM).
- Mac Group LTD.
- Sinare, Shiyò and Mwandambo Advocates.

PAYMENT TERM:

100% payment after completion of installation, testing and commissioning.

PRICE VALIDITY.

60 days from the date of this quotation and there after on our confirmation.

DELIVERY:

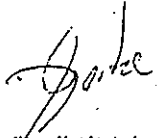
The product comes with one-year warranty, but this warranty covers faults due to manufacturing, designing and not faulty due to TANESCO POWER

Waiting to hear from you,

Assuring you of our best attention at all times.

Voice and Data Solution

Respectively yours,
FM COMMUNICATIONS LTD.



Radhili Magembe
MANAGING DIRECTOR



PROPOSAL FOR ESTABLISHMENT OF LOCAL AREA NETWORK (LAN) AT NATIONAL BUREAU OF
STATISTICS

PREPARED

BY

UNIVERSITY OF DAR ES SALAAM COMPUTING CENTRE

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I: LAN DESIGN AND MATERIAL ESTIMATION

1.0: INTRODUCTION

This document describes the Local Area network, which has to be installed at NATIONAL BUREAU OF STATISTICS

2.0: THE PROPOSED LAN DESIGN.

The LAN is designed in such a way that it is easy to maintain and caters for applications that have a high demand on the network. This will be 10/100Mbps Ethernet and of a star topology. In this topology, all computers are independently connected to an Ethernet Hub using category 5 UTP cables. Thus, all connected computers shall have access to the network resources independently and with equal priorities. Further more; the fault in one computer shall not whatsoever affect any of the rest computers provided that the hub is working properly.

This design is compliant with International standards for UTP Switched Ethernet Networking. Adhering to these standards makes expansion of networks (adding more users and computers) much easier. The UTP Cable system that will be used is category 5 which has become the industry standard and selected standard for most of today's network. Category 5 UTP is designed to:

1. Handle traffic at a rate of 100Mbps,
 2. Support voice and data communication also at a rate of 100Mbps, and
- The Electronics Industry Association and Telecommunications Industry Association (EIA/TIA) as the standard wiring for buildings support it.

Since a switch has a capacity of a definite number of hooked computers, the LAN will be composed of a number of cross-connected switches along with their hooked computers.

3.0: WIRING AND CABLING

In order to simplify LAN maintenance and troubleshooting, Labeling will be used at both ends, which are hubs and the faceplates whose convenient position depend on the building itself and distances from individual connection point.

Each installed node will be connected to the Hubs through Patch Panels, which are connected to the Hub ports using Patch Cables. UTP Cables runs from the hub to each room where the other end of cable is terminated. Survey and analysis made by our Engineers on the number possible connection points in each computer habitable rooms of the building and the total length of cables from the proposed central positions to each room are shown in table 4.0.1 below.

4.0 ESTIMATION OF LAN MATERIALS

Based on the indicated connection points and their approximated distances from the central locations, the LAN is expected to consume the materials shown in table below.

Bill of Materials to be supplied by UCC.

1ST FLOOR BUILDING A

No.	QTY	DESCRIPTIONS	US\$	US\$
			Each	Total
1.	98Pcs	RJ 45 connectors	0.30	29.40
2.	3Pcs	Patch panel (D-LINK)-24-port	130.00	390.00
3.	38Pcs	Trucking materials (25x50) mm-3m long	10.00	380.00
4.	2Boxes	Woodscrews	1.00	2.00
5.	1pc	Switch 24port 10/100mbps	300.00	300.00
6.	1pc	Switch 16port 10/100mbps	240.00	240.00
7.	2pcs	Switch 8port 10/100 mbps	120.00	240.00
8.	2Boxes	Fisher plugs	1.00	2.00
9.	1tube	Crack filler	2.00	2.00
10.	1Pc	Silicon sealant	3.50	3.00
11.	49Pcs	Moulded boxes	1.00	49.00
12.	2Pcs	Masking tape	1.00	2.00
13.	49Pcs	Face plates	10.00	490.00
14.	5Boxes	UTP Cable (CAT 5E) 350 MHz	50.00	250.00
15.	1pc	Rack cabinet 9u-19"	250.00	250.00
16.	2pcs	Raw bolt 12mm	1.00	2.00
				2631.40

GROUND FLOOR BUILDING A

No.	QTY	DESCRIPTIONS	US\$	US\$
			Each	Total
1	8Pcs	RJ 45 connectors	0.30	2.40
2	17Pcs	Trucking materials (25x50) mm-3m long	10.00	170.00
3	17Pcs	RJ 45 connectors	0.30	5.10
4	1Boxes	Woodscrews	1.00	1.00
5	1Boxes	Fisher plugs	1.00	1.00
6	1tube	Crack filler	2.00	2.00
7	8Pcs	Moulded boxes	1.00	8.00
8	1Pcs	Masking tape	1.00	1.00
9	8Pcs	Face plates	10.00	80.00
10	1Boxes	UTP Cable (CAT 5E) 350 MHz	50.00	50.00
		TOTAL		320.5

BUILDING B

1	3Pcs	Trucking Material (50x25)3m long	10.00	30.00
2	4Pcs	Face plates	10.00	40.00
3	1Boxes	UTP Cable (CAT 5E) 350 MHz	50.00	50.00
4	4pcs	Moulded boxes	1.00	4.00
5	8pcs	RJ 45 connectors	0.30	2.40
		TOTAL		126.40

1ST FLOOR BUILDING C

No.	QTY	DESCRIPTIONS	US\$	US\$
			Each	Total
1.	14Pcs	RJ 45 connectors	0.30	4.20
2.	7Pcs	Trucking materials (25x50) mm-3m long	10.00	70.00
4	1Boxes	Woodscrews	1.00	1.00
5	1Boxes	Fisher plugs	1.00	1.00
6	1tube	Crack filler	2.00	2.00
7	1Pc	Silicon sealant	3.50	3.50
8	7Pcs	Moulded boxes	1.00	7.00
9	1Pcs	Masking tape	1.00	1.00
10	7Pcs	Face plates	10.00	70.00
11	1Boxes	UTP Cable (CAT 5E) 350 MHz	50.00	50.00
		TOTAL		209.70

2ND FLOOR BUILDING C

No.	QTY	DESCRIPTIONS	US\$	US\$
			Each	Total
1.	20Pcs	RJ 45 connectors	0.30	6.00
2.	13Pcs	Trucking materials (25x50) mm-3m long	10.00	130.00
3	1Boxes	Woodscrews	1.00	1.00
4	1Boxes	Fisher plugs	1.00	1.00
5	1000pcs	Self tapping screws	0.35	350.00
6	1tube	Crack filler	2.00	2.00
7	1Pc	Silicon sealant	3.50	3.50
8	10Pcs	Moulded boxes	1.00	10.00
9	1Pcs	Masking tape	1.00	1.00
10	10Pcs	Face plates	10.00	100.00
11	1Boxes	UTP Cable (CAT 5E) 350 MHz	50.00	50.00
12	2Pcs	Patch Panel 24port 10/100mbps	130.00	260.00
13	1pc	Rack cabinet 9u-19"	250.00	250.00
14	1roll	2.5mm electrical cable	35.00	35.00
		TOTAL		884.50

BUILDING D

No.	QTY	DESCRIPTIONS	US\$	US\$
			Each	Total
1.	28Pcs	RJ 45 connectors	0.30	8.40
2.	7Pcs	Trucking materials (25x50) mm- 3m long.	10.00	70.00
3	1Boxes	Woodscrews	1.00	1.00
4	1Boxes	Fisher plugs	1.00	1.00
5	1tube	Crack filler	2.00	2.00
6	1Pc	Silicon sealant	3.50	1.00
7	14Pcs	Moulded boxes	1.00	14.00
8	1Pcs	Masking tape	1.00	1.00
9	14Pcs	Face plates	10.00	140.00
10	1Boxes	UTP Cable (CAT 5e) 350 MHz	50.00	50.00
		TOTAL		288.4

1.0: SUMMARY OF TOTAL MATERIAL AND COSTS

No	Description	Total Price (US\$)
1.	Costs for LAN material	4519.00
2.	LAN installation and setup charges.	3,500.00
5.	TOTAL	8,019.00

At least 70% of the total cost should be paid in advance. The rest of the payments shall be invoiced on completion of the job and should be paid within thirty (30) days from the date when the invoice was raised.

All payments shall be addressed to the Director, University Computing Center LTD either by Cheque or in Cash.

2.0: LAN TESTING

When LAN installation is complete, the acceptance test will be carried in which each connection point (faceplate) will be tested. The test shall take into consideration the flow of signals from each faceplate to its connecting SWITCH.

3.0: LAN WARRANTY, SUPPORT AND MAINTANANCE.

The LAN shall be in one-year warranty from the acceptance day. During this period, UCC will provide support and maintenance of the LAN and modifications to the infrastructure must be done in consultation with UCC.

4.0: ACCEPTANCE OF THE PROPOSAL

On accepting the terms and conditions of this proposal, the NATIONAL BUREAU OF STATISTICS are requested to write a letter of acceptance to the Director, University Computing Center and thereafter the installation shall follow.

No	Location	Description
1	Customer	University of Dar es Salaam Main Campus Buildings
	Contact Person	CADO
	Tel no:	2410005
	Physical Location	Dar E s salaam Mlimani
	Job Title :	LAN/ WAN set up, Support and Maintenance for all buildings
2	Customer	Vice President Office (HQ)
	Contact Person	Hon. Molle/ DAP
	Tel no:	2128771/2
	Physical Location	Near State House (dar Es salaam)
	Job Title :	LAN set up, Support and Maintenance
3	Customer	Prime Ministers Office
	Contact Person	Mr Kahunga
	Tel no:	0744272042
	Physical Location	State House
	Job Title :	LAN set up, Support and Maintenance
4	Customer	World Health Organization
	Contact Person	Mr Kijazi
	Tel no:	2113005
	Physical Location	Dar E s salaam (Lumumba Building)
	Job Title :	LAN set up, Support and Maintenance
5	Customer	Tanzania Investment Centre
	Contact Person	Mr. Kuwite/ Gao
	Tel no:	2116328/31
	Physical Location	City center- (Dar es salaam)
	Job Title :	LAN set up, Support and Maintenance
6	Customer	NAEP
	Contact Person	Mr Mwinjuma
	Tel no:	2866351/401
	Physical Location	KILIMO
	Job Title :	LAN set up, Support and Maintenance
7	Customer	Tanzania Oxygen LTD
	Contact Person	Shewishi
	Tel no:	22-2860047
	Physical Location	Nyerere Road. (Dar es salaam)
	Job Title :	LAN set up, Support and Maintenance

8	Customer	Ministry of Industry & Trade
	Contact Person	Chilumanje
	Tel no:	744-821590/741-623513
	Physical Location	Dar Es salaam
	Job Title :	LAN set up, Support and Maintenance
9	Customer	Min. of Marketing and Cooperation
	Contact Person	Dr. Turuka
	Tel no:	
	Physical Location	Dodoma:
	Job Title :	LAN set up, Support and Maintenance
10	Customer	Ministry of Works
	Contact Person	Mr. Sasilo/
	Tel no:	2113005
	Physical Location	Dar E s salaam
	Job Title :	LAN set up, Support and Maintenance
11	Customer	Min. of Women's and Children
	Contact Person	Ms Jamila
	Tel no:	2134649
	Physical Location	Dar E s salaam
	Job Title :	LAN set up, Support and Maintenance

**This is to mention the few



PROFORMA INVOICE	NO: prof005
Mr Ota Akira	DATE: 5 th July 2003
National Bureau of Statistics	
Dar-es-Salaam	

NO	PARTICULARS	AMOUNT
	Being cost for LAN for Additional points and LAN repairs	USD\$5,814.05
	VAT 20%	USD\$1,162.86
<p>Payments to be made to : Soft-Tech Consultants Ltd.</p> <p style="text-align: center;">IN</p> <p>USD A/c No. 87020 - 054725 - 00</p> <p style="text-align: center;">OR</p> <p><u>TSHS.A/C No. 01020-054725-00</u></p> <p>With</p> <p>Standard Chartered Bank Tanzania Ltd.,</p> <p>SWIFT: SCBLTZTX, Telex: 41524 SCBDAR TZ</p> <p>P O Box 9011, Dar es Salaam, Tanzania</p> <p>Prevailing Rate: 1USD = TShs1,06.00</p>		
	Amount in Words: United States Dollars Six Thousand Nine Hundred Seventy Six Cents Eighty Six Only	US\$6,976.86
	VAT No: 10-000996-U TIN No: 100-112-949	

SOFT-TECH CONSULTANTS LTD.
 DAR-ES-SALAAM
 Tel: 255 22 2180635/8 & 703

Soft-Tech
 2nd Floor, Lumumba Complex, 28-31 Lumumba Street, P.O. Box 169, Dar es Salaam, Tanzania
 Tel: +255 22 2180635/8, 2180625, 2180703, Fax: +255 22 2180673
 E-mail: info@stcl.com, Web: www.stcl.com

Bill of Quantities for National Bureau of Statistics

Contact Person: Mr. Genes Sukwa / Ota Akira
 Address: P O Box 795, DSM Tanzania

Special Notes:

This BOQ caters only for the additional 28 points requested and 7 points which needs to be checked
 Existing Network does not follow structured cabling standards and contains combination of 10 base T & 10
 Base 2 which cannot be converted to handle 100Mbps speeds. In order to achieve 100Mbps, the entire network
 needs to be restructured to comply with Cat5e Structured Cabling standards
 All 7 repair points will be treated as new installation points
 Cabling for above 28 additional points and 7 repair points will be done using surface mounted 16mm by 16mm
 by 3m PVC trunking and single gang cat5e wall boxes and cable
 In the BOQ we are proposing a single cable run between building C and D using a galvanized conduit which
 will pass underground at the depth of 1ft
 Existing link between building A to building B will be used as a backbone and one hub will be located in
 building B

No	Item Code	Item Name	Point Location	Price	Qty	Total
		Networking Accessories				
1	GPU	GigaPlus Cat 5e UTP Cable, PVC Sheath 305m box		\$100.00	6	\$600.00
2	SPA006	Wall Outlet Cat 5e Incl 1 x RJ45 110 IDC module, faceplate and back box		\$22.00	35	\$770.00
3	GPC-PC-U-050-888	5m coloured Cat 5e UTP PVC patchcords with grey boots		\$10.00	35	\$350.00
		Additional Hubs				
4	3C16411	SuperStack 3 Baseline, 24 port 10/100 Hub	Building A1	\$525.00	1	\$525.00
5	3C16410	SuperStack 3 Baseline, 16 port 10/100 Hub	Building C1	\$250.00	1	\$250.00
6	3C16753	OfficeConnect Dual Speed Hub 8	Building D & C0	\$212.85	2	\$425.70
7	3C16753	OfficeConnect Dual Speed Hub 8	Building B	\$212.85	1	\$212.85
		Hub Shelf		\$10.00	4	\$40.00
		PVC Trunking				
8		16mm X 16mm X 3m		\$4.00	100	\$400.00
		Galvanised Conduit				
9		3/4" galvanised pipe between Building C and D passed underground at 1ft depth - 6m length		\$15.00	1	\$15.00
10		3/4" galvanised pipe between Building C and B passed underground at 1ft depth		\$15.00	1	\$15.00
		Fixture & Fittings				
11		Wood Screws (Pack of 100pcs)		\$2.00	25	\$50.00
12		Fichers (Pack of 100pcs)		\$2.00	25	\$50.00
13		PVC Clips (Pack of 100pcs)		\$2.00	5	\$10.00
14		Cable Ties (Pack of 100pcs)		\$3.50	3	\$10.50
		Labourers				
15		Casual Labourers for digging the trench between building C & D		\$10.00	2 days	\$20.00
16		Casual Labourers for digging the trench between building C & B		\$10.00	2 days	\$20.00
17		Casual Labourers for installing PVC trunking for all the additional network points		\$10.00	5 days	\$50.00
18		Engineer time		\$400.00	5 days	\$2,000.00
		Total				\$5,814.05
		VAT				\$1,162.81
		Grand Total (Total + VAT)				\$6,976.86

July 22, 2003
Ota Akira - JICA Volunteer

TO: ITM
CC: DFAM, STO

RE: NBS LAN expansion

It is proposed that the new installation for local area network in NBS be executed to expand the current network into every office with sufficient number of network point. The aims of the installation are stated below;

1. To promote the data and information sharing through the network in harmonized way
2. To utilize internal & external e-mail as daily manner in every focal point
3. To repair some faulty network points
4. To increase the speed of network from 10 Mbps to 100 Mbps¹ and further more in the future

A. Minimum Installation and Full Installation

Proposed number of additional network point (28 points) is shown in Appendix_A. This proposed number is based on the requirement from each office. It is mentioned that the number of network point for allocation in each office should be reconsidered in NBS meeting before the installation. Currently 47 network points are stretched in NBS offices.² 33 network points out of 47 are currently utilized by NBS staffs and accessible to NBS server and the Internet. 7 points out of 47 do not function at all, possibly because of rat and mice biting network cable, electrical faults, natural disasters etc.

This time NBS has three options stated below regarding network expansion;

1. No need to extend the network since the above stated 4 aims are not necessary
2. Minimum installation (This is for the addition of 28 network points & the repairing of 7 faulty points)
3. Full installation (This is for restructuring whole network)

It is recommended to consider the full installation due to the 2 following reasons;

1. Current network structure is not well constructed. First of all, there is no map of network cabling because of the neglect of last entrusted computer company, COMPUTER DOCTOR Ltd, constructed in 1997/98. So once network points become not to be functioning, it is not easy to repair the faulty network points because of the difficulty of tracing them. And also some of the network cables are not protected so well and exposed outside, so rats can bite the cable and the cable would be disconnected to the network. Currently 7 network points are not functioning as stated in Appendix_A, and the number might be increased in the future.
2. Current type of network cable used in NBS is category 5. But the type of current industry standard is category 5e. And the newest type of cable is category 6. The speed of each type of cable are stated below;

Type of cable	Range of Speed
Category 5	10 Mbps - 100 Mbps
Category 5e(current standard)	10 Mbps - 1000 Mbps
Category 6	10 Mbps -

¹ Although current speed of NBS network is 10 Mbps, 100 Mbps is the speed of current industry standard. This upgrade will increase the speed of data transferring among NBS network, not speed of access to the Internet.

Some of the old PCs need to exchange their network adapters with new one, which is compatible with 100 Mbps.

² The number of 47 is the amounts of network points that has been identified by Ota Akira-JICA volunteer so far, but that number is probably the total number of points in NBS. One problem on the NBS network is non-availability of the map of NBS network structure. The last network installation was done by COMPUTER DOCTOR Ltd, which no longer exists, in 1997/8 according to Mr. Mbega, NBS IT&M staff.

Current trend of network speed is 100 Mbps using category 5e, but the speed of NBS network is still 10 Mbps with category 5.
It is recommended to upgrade the speed from current 10 Mbps to 100 Mbps first for the efficient speed of communication within the NBS network.
And in the near future, the time will come when the dominant speed of network is 1000 Mbps. Considering those points, it is recommended to apply category 5e to the whole office rather than to mix new type of cable with old one, not only for the improvement of current network status but also for the future upgrading to 1000 Mbps.

B. Selection of Service Provider

Simple cost comparison of 5 quotations is presented in Appendix_B. The actual quotations are kept at STO. And copies of them are in Open Registry.
I have contacted 5 computer service providers and the impressions of positive points and negative points in each provider are shown below;

	Positive Points	Negative Points
CC	1.Competitive Service charge 2.Prompt response 3.Good experience	
UCC		1. High charge for labour
Soft-tech	1. Conducted deep site survey at NBS	1. Slow response
Micronix		1. Very slow response 2. High charge
FM		1. Slow response 2. Lack of manpower

* CC - Computer Centre [Tz] Ltd
UCC - University of DSM Computing Centre
FM - FM Communications Ltd

Computer Centre Ltd and Soft-tech Ltd were the recommended company by ITM. Micronix Ltd is the provider for the computer maintenance of NBS selected by NBS tendering 2003. FM communications Ltd is the provider for the telephone and computer network maintenance of NBS selected by NBS tendering 2003. University of DSM Computing Centre was additional.

According to the NBS tendering, FM communications Ltd is supposed to conduct the installation. But it is not recommendable to entrust the duty to them, because of the lack of manpower (3 engineers), slow processing of making quotation and short experience of the service in the market. So NBS cannot expect professional installation and high service after installation.

Micronix Ltd is also one of computer service provider for NBS. But it is also not recommendable to entrust, since their service charge is not so competitive and they are always taking extra time to make decision.

My recommendation is Computer Centre, because of their competitive price and the fastest response among those 5 companies.

Before entrusting any providers, NBS IT department should conduct survey at reference sites of possible service provider, in order to assess the competence in terms of installation skill and service after the installation.

It is also mentioned that NBS needs to complete the refurbishment on ground floor of building A before the network installation.

SatCom Networks Africa Ltd

Information Brochure





1 About The Company & Network

1.1 The Company

SatCom Networks Africa (SCNA) is a data communications operation of Soft-Tech Consultants Ltd, a Tanzanian company licensed to operate as a Public Data Operator and is located on the 9th Floor of CRDB Building, Azikiwe Street, Dar es Salaam.

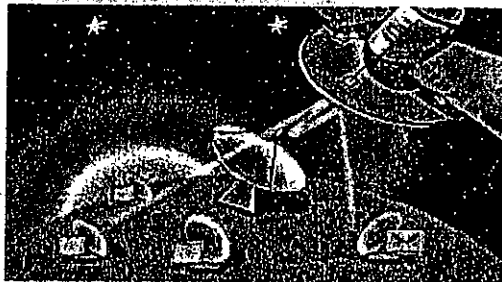
SCNA operates a hub in Dar es Salaam which manages the entire network and support services are offered on a 24hrs x 7 days basis by a team of trained and dedicated network managers & technical support team.

The network operates via IntelSat satellite. IntelSat has the largest satellite network in the world for commercial use and extensive experience in provision of services.

1.2 Supported Network Connectivity

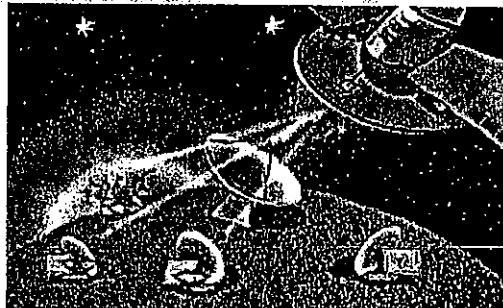
➤ **Point-to-point connection**

- VSAT to hub in a client server way - Unicast
- VSAT to VSAT



➤ **Point-to-multipoint connection**

- HUB to all VSAT's - Broadcast
- HUB to groups of VSAT's - IP-Multicast





1.2.1 VSAT to Hub Connectivity

1.2.1.1 National Network for Central Systems in Dar es Salaam

This is ideal for users who have a national network with headquarters in Dar es Salaam. In this case each remote site will have a VSAT and all traffic will pass through the SCNA Hub in Dar es Salaam to the client's central system using a high speed link between the SCNA Hub and the client's central systems. In this case please note that there is no VSAT required at the client's headquarters. All network services are provided via the high speed link to the SCNA Hub.

1.2.1.2 National and International Network

Similar to the network in 1.2.1.1 above, the client's central systems may be located outside Tanzania. In this case all national (within Tanzania) traffic will be routed through the SCNA Hub in Dar es Salaam and from the SCNA Hub to any international destination. The individual sites within Tanzania can also communicate with each other without traffic having to be routed through the international circuit.

1.2.1.3 International Network

This is suitable for a client with a single site within Tanzania but requires a link to any international destination. All communications will be through the SCNA hub.

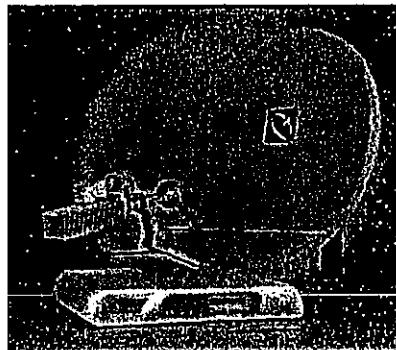
1.2.2 VSAT to VSAT Connectivity

A VSAT to VSAT network allows geographically dispersed offices within Tanzania to communicate with each other. All client's sites require a VSAT. The headquarters / central systems can be located at any site.

1.3 The VSAT

The VSAT to be installed at client premises consists of two components namely

- 1.8m Antenna and
- Indoor unit





Basic requirements are a secure place to mount the antenna & indoor unit and provision of power. The power consumption of the whole unit is less than 25watt and can be operated on:

- normal power
- generator
- solar power

A single computer or a local area network (through a switch or hub) can be directly connected to the indoor unit through a RJ45 Ethernet / USB port. There is no need for additional routers.



2 Advantages of Satellite Based Networks

Major telecommunications providers, businesses and governments around the globe have chosen to implement enterprise networks, telephony systems and broadband IP solutions based on very small aperture terminal (VSAT) satellite technology.

Small businesses, schools, remote farms, Internet Service Providers, air traffic controllers, financial services, banks, restaurants, retailers and other enterprises worldwide choose VSAT satellite networks for a number of key reasons:

2.1.1 Ubiquitous Availability

Satellite is the only telephony and broadband wide-area network technology that is available everywhere - in even the most remote urban and rural areas, rain forests or concrete jungles, anywhere in the world. All that's needed is a clear view of the sky.

2.1.2 Superior Economics

Satellite networks are much less costly to deploy, maintain and operate than terrestrial network technologies. Terrestrial networks require heavy infrastructure, whether they are telephony networks (based on copper wiring, fibre optic cables, radio or microwave towers), or broadband data networks (such as Frame Relay, DSL, ISDN and cable). High overhead costs for these infrastructures are passed on to the customer. In remote areas where such infrastructure does not exist, the expense of building such networks is often prohibitive, in developing and developed countries alike.

2.1.3 Equal Access

All VSAT's on the network have equal access (or unequal as required) unlike terrestrial networks where the same data rate is not available at all the branches because the terrestrial network is not equally developed throughout the country.

2.1.4 Reliability

Satellite networks provide unmatched reliability, with far fewer potential points of failure than terrestrial solutions and built-in redundancy at almost every level to limit service interruptions when problems do occur.

2.1.5 Timely Deployment and Installation

Satellite networks can be rolled out to hundreds or thousands of locations in a fraction of the time required for a comparable terrestrial network.

. But VSAT technology is almost completely free of terrestrial infrastructure, so there is no need for coordination with any third party. With a satellite network, installation and deployment are quick and simple.



2.1.6 Multicast Content Distribution

Satellite's inherent strengths as a broadcast medium makes VSAT networks ideal for the distribution of bandwidth-intensive information - data, video or audio - to large numbers of remote locations.

2.1.7 Site Relocation and Addition

Relocating and adding network sites is significantly less complicated and less expensive with a satellite network than with most terrestrial technologies. With a satellite network, installation of new sites takes just a few hours. Relocation can occur on the same day, in most cases, if the sites are close to one another. And no additional terrestrial infrastructure is ever required.

2.1.8 Network Capacity Expansion

Satellite technology provides a uniquely convenient environment for accommodating network and bandwidth expansion.

With a satellite network, network expansion is extremely easy and comparatively inexpensive. First, all bandwidth allocation is controlled at the hub, so increasing network capacity is as simple as increasing the amount of bandwidth allocated to the network.

2.1.9 Flexibility and Expandability

SCNA's VSAT technology has an unmatched ability to support a wide range of devices and applications. Single platforms can provide voice, fax, data and Internet connectivity; data networks can support advanced functions including IP multicasting.

And satellite technology - with its unique broadcast and multicast capabilities - is the only choice for companies planning video and high-bandwidth content distribution as part of their wide-area network future.



3 Communication Services Offered

3.1 National & International Circuits

National private circuits (within Tanzania) are for communication between VSAT's or VSAT's to Hub within Tanzania. The bandwidth provision and hence cost will depend on the following:

- Type and nature of application
- Response time required
- Volume of information
- Hours and time of access

Bandwidth can be made available based on customer requirements and can be shared or dedicated.

For international circuits additional criteria would include:

- Destination of the international circuit

The national / international circuits can be used for a number of applications:

- Software applications with centralized servers like financial management, inventory management, point of sale systems

3.2 Internet Access

The SCNA network is connected to the internet backbone via Europe and access can be made available to all clients connected to the SCNA network in addition to the national and international private circuits.

3.3 Video and Audio Multicast / Broadcast

Audio and video can be broadcast from the hub to any VSAT on the SCNA network. The service is ideally suited for distance education and training of employees at geographically dispersed locations.

A TV can be connected to the VSAT and training programs can be broadcast to be viewed at each remote site. Clients can either deliver training content in video tapes or SCNA has three studios where the trainer can deliver training programs which can be delivered to the client's sites. At each site telephone links can be provided back to the studio so that participants in the training programs can communicate with the lecturers at the SCNA studios.

This can be a very effective manner to provide training to a large number of client staff without having to move staff and normally using 2 / 3 hours during or immediately after working hours thereby not affecting the normal working schedules.



These services can also be used for clients own advertising within client sites e.g. running promotion adverts within post offices.

3.4 Telephone and Fax services

Clients can call using telephones and send faxes to their own sites (as backup) or to the SCNA hub for support through the SCNA network. Calls / faxes outside the clients group of sites is not supported at present as the Public Data Operator License of SCNA does not allow for the same. Such services should be availed from authorized PSTN operators.

3.5 Other Services

3.5.1 Consultancy Services

SCNA offers consultancy services in the design and implementation of networks for different applications including setting up and operating secure networks.

The services are offered by highly qualified consultants with long term experience of implementing systems over wide area networks.

3.5.2 Supply, Installation and Commissioning of Networks

Services include supplying equipment required, cabling, configuring systems and commissioning networks that integrate client systems across geographically dispersed sites. Services will also include supply, installation and commissioning of local area networks.



Contract

This contract is entered into by and in between SatCom Networks Africa Ltd. (hereinafter referred to as SatCoNet) of 9th Floor, CRDB Building, Azikiwe Street, P O Box 79315, Dar es Salaam, Tanzania and

Date of Issue		Contract Number	
---------------	--	-----------------	--

SERVICE DESCRIPTION

1. Customer Details

Name	
Billing Address	
Street Address	
P O Box	
City / Town	
Country	
Telephone	
Fax	
E-Mail	
Contact Person	
Name	
Designation	
Telephone	
E-Mail	

2. Service Location

Location Address	
Street Address	
P O Box	
City / Town	
Country	
Telephone	
Fax	
E-Mail	
Contact Person	
Name	
Designation	
Telephone	
E-Mail	

Customer Initials	
-------------------	--

SatCoNet Initials	
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3. Service Details

3.1. Connection Type

VSAT		Wireless	
Antenna Type		Antenna Type	
Antenna Size		Antenna Size	
Mounting Type		Mounting Type	
VSAT No.		Indoor Unit Type	
Add on Card 1			
Add on Card 2			
Add on Card 3			

3.2. Bandwidth and Internet Access

VSAT			Wireless		
Bandwidth		Kbps / Mbps	Bandwidth		Kbps / Mbps
Internet Access	Yes / No		Internet Access	Yes / No	
Monthly Service Charge			Monthly Service Charge		

3.3. Service Term

VSAT		Wireless	
Required Delivery Date		Required Delivery Date	
Service Term		Service Term	
Service Commencement Date		Service Commencement Date	
Service Termination Date		Service Termination Date	

3.4. Other Charges

VSAT		Wireless	
Installation Charge		Installation Charge	
Service Activation Charge		Service Activation Charge	
Equipment Charges		Equipment Charges	

3.5. Service Collateral

VSAT		Wireless	
Amount		Amount	

Signed for Customer:		Signed for SatCom Networks Africa Ltd.	
Name :		Name :	
Designation :		Designation :	
Date :		Date :	

Customer Initials	
-------------------	--

SatCoNet Initials	
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Bukoba Diocese

Equipment

Description	Unit Cost	Qty	Total Cost	VAT	Cost + VAT
VSAT IDU	\$3,900.00	1	\$3,900.00	\$0.00	\$3,900.00
Antenna	\$1,500.00	1	\$1,500.00	\$300.00	\$1,800.00
Cable	\$300.00	1	\$300.00	\$60.00	\$360.00
Connectors	\$30.82	1	\$30.82	\$6.16	\$36.98
Mounting	\$380.00	1	\$380.00	\$76.00	\$456.00
Voice Plug in Card	\$600.00	1	\$600.00	\$120.00	\$720.00
Total	\$6,710.82		\$6,710.82	\$562.16	\$7,272.98
Services (outside Dar)					
Site Survey	\$600.00	1	\$600.00	\$120.00	\$720.00
VSAT Installation & Commissioning	\$1,400.00	1	\$1,400.00	\$280.00	\$1,680.00
Total			\$2,000.00	\$400.00	\$2,400.00

2001

Option 1

Monthly Dedicated Bandwidth Costs (inclusive of Internet)

Speed	Cost	VAT	Total
32K	\$631.00	\$126.20	\$757.20
64K	\$1,251.00	\$250.20	\$1,501.20
128K	2,200.54		

← 32Kサービスは廃止

Sat Com

VSATの値上げ表

増徴

Mr. Kozu.
Govt - does not pay VAT! This is for you
You can contact Leena Kapadia
Tel: 2138433/4
Mob. 0744.307464
Tel her you got this budget
from Dio - Computer Committee

Raha Internet Service Charge(\$)

Dialup Access (56kbps)	All Region	
	Excl.VAT	Incl.VAT
Monthly Access	49	58
3-month Access	145	174
6-month Access	275	330
12-month Access	525	630

VSAT / Wireless Access(Dedicated) monthly charge	All Region		
	Excl.VAT	Incl.VAT	
8kbps / 16kbps	250	300	Minimum Bandwidth Option for Wireless
16kbps / 32kbps	400	480	Minimum Bandwidth Option for KU-Band Service
32kbps / 64kbps	800	960	Minimum Bandwidth Option for C-Band Service
64kbps / 128kbps	1500	1800	

5 Additional Global IP's for the every option of above bandwidth(monthly) : 50\$(excl.VAT), 60(incl.VAT)

13 Additional Global IP's for the every option of above bandwidth(monthly) : 100\$(excl.VAT), 120\$(incl.VAT)

VSAT / Wireless Access(Shared)	All Region	
	Excl.VAT	Incl.VAT
Monthly	50	60
Yearly	500	600

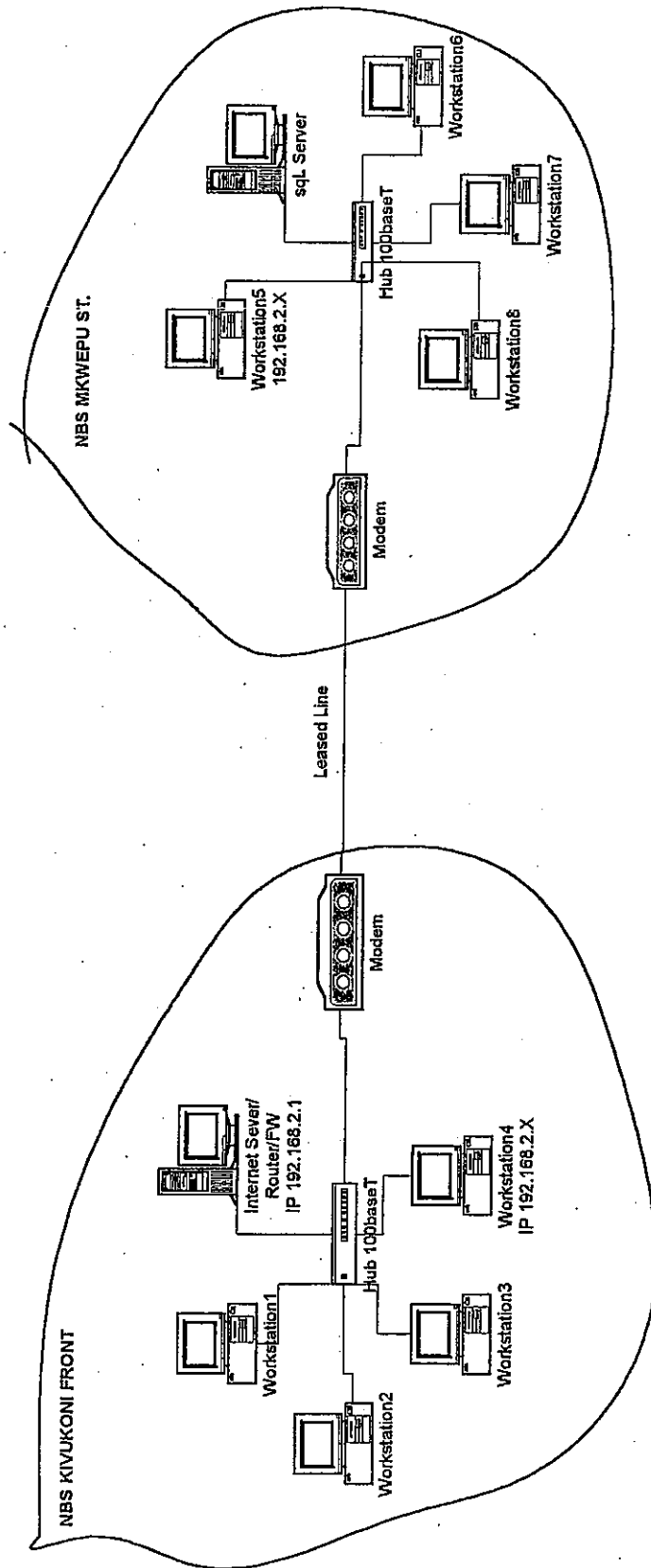
* In the case of shared bandwidth, the amount of kbps is not fixed.

Hardware purchase for Wireless	Excl.VAT	Incl.VAT	Installation		Total	
			Excl.VAT	Incl.VAT	Excl.VAT	Incl.VAT
Alvarion SA10D	1250	1500	300	360	1550	1860
Raylink Wireless	1000	1200	200	240	1200	1440
Dlink SOHO Router	300	360	0	0	300	360

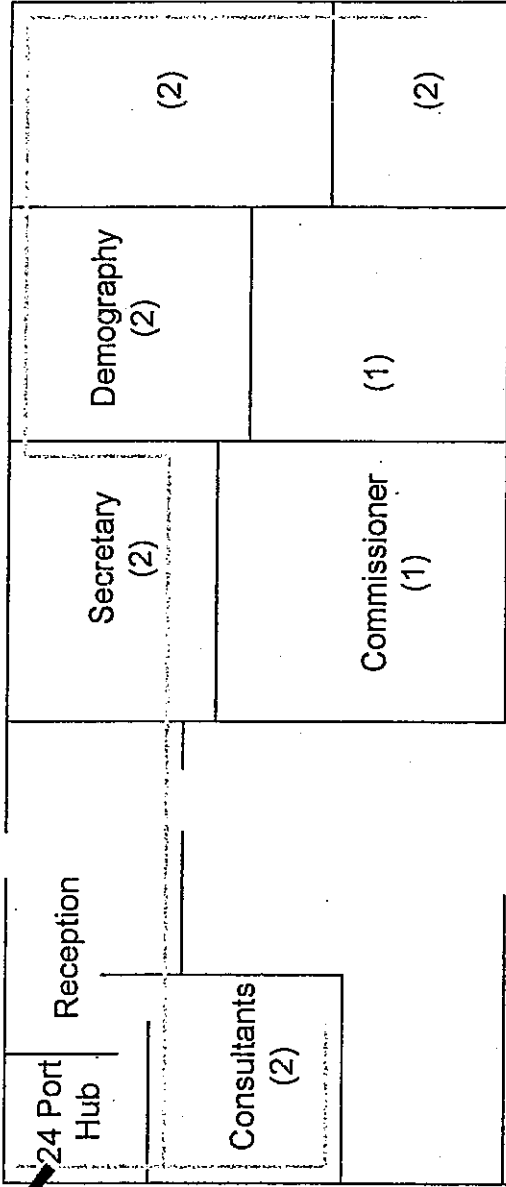
Hardware purchase for VSAT	Excl.VAT	Incl.VAT	Installation		Total	
			Excl.VAT	Incl.VAT	Excl.VAT	Incl.VAT
KU-Band 1.2M	4990	5988	750	900	5740	6888
KU-Band 1.8M	5990	7188	750	900	6740	8088
C-Band 1.8M	12990	15588	1500	1800	14490	17388

Raha

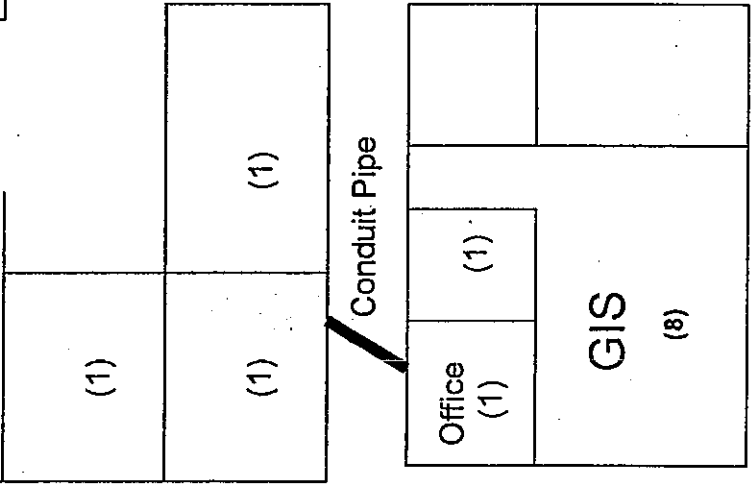
LEASED LINE CONNECTION BETWEEN MKWEPU AND KIVUKONI FRONT



MAP GOR GROUND FLOOR

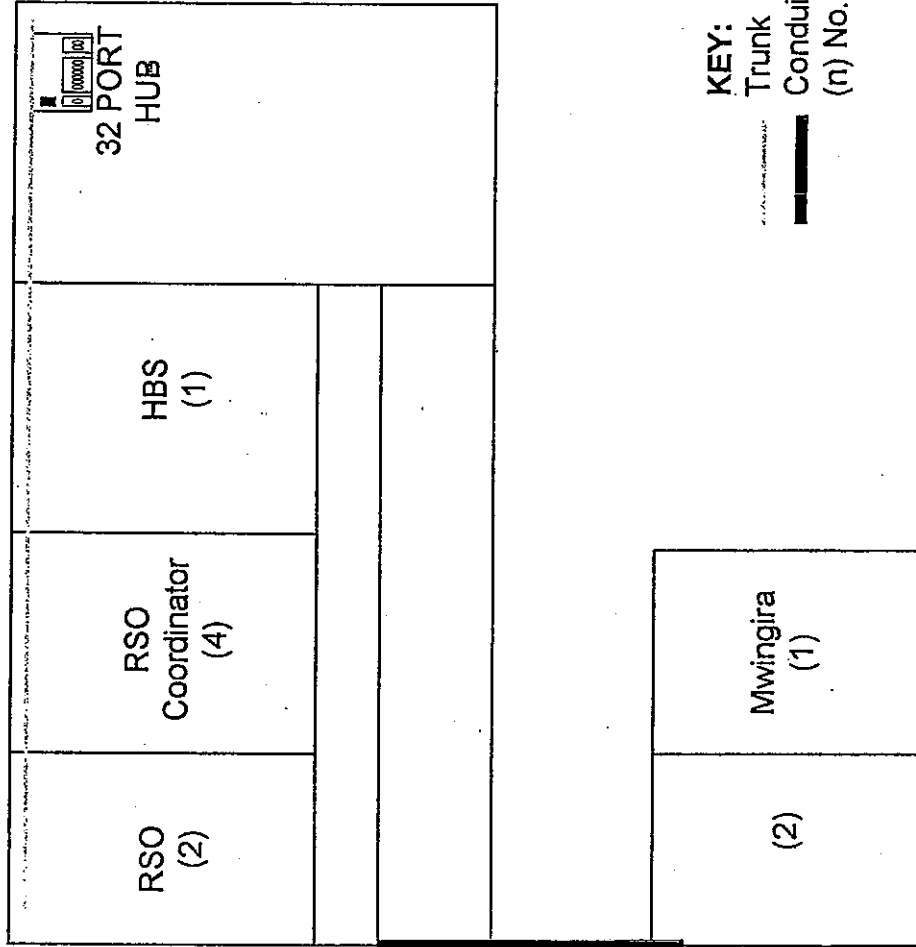


Conduit Pipe to 1st floor



KEY:
 Trunk
 Conduit Pipe
 (n) No. NW Point

FIRST FLOOR PLAN



Conduit Pipe to G. Floor

Appendix_A

NBS Head Quarter, Current networking status & proposed number of additional network point (July, 2003)

S/N	Building ID	Floor	Office No	Section	Number of NBS staff	Number of Network point	Number of currently utilized point	Number of faulty network point	Number of NBS Printer	Number of NBS Computer	Proposed number of additional networkpoint	Proposed number of additional S/Hub
1	A	0	1	IT&M		1		1				
2	A	0	2	BookBinder	1						1	
3	A	0	3	IT&M	1	2	1		1	1		
4	A	0	4			1				1		
5	A	0	5(a)	Library	1	1	1			1		
6	A	0	5(b)	Library								
7	A	0	6(a)	IT&M							1	
8	A	0	6(b)	IT&M							2	
9	A	0	6(c)	IT&M							1	
10	A	1	1	Labour&Price	1	1	1		2	2		
11	A	1	2(a)	Labour&Price	2						1	
12	A	1	2(b)	Labour&Price	3				1	2	2	
13	A	1	3	DFAM	1	1	1		1	2		
14	A	1	4	TSED_DMA	1	1	1		1	2		
15	A	1	5	DSSD	1				1	2	1	
16	A	1	6(a)	OpenRegistry	3					1	1	
17	A	1	6(b)	OpenRegistry	1					1	1	
18	A	1	7(a)	PAM	1	1	1			1		
19	A	1	7(b)	PAO	1	1	1			1		
20	A	1	8(a)	FAM	1	1	1			1		
21	A	1	8(b)	Acct	3					2	2	
22	A	1	9(a)	DG	1	1	1			2		
23	A	1	9(b)	P/S	2	1	1		1	2	1	
24	A	1	10(a)	DSOD	1	2	1		1	2		
25	A	1	10(b)	Server		1	1					1(24port)
26	A	1	11(a)	DESD	1	1	1			2		
27	A	1	12(a)	NA	3	6	3	3	1	5		
28	A	1	13	NA	1	1	1		1	2		
29	A	1	14	IT&M	1	3	2		1	1		
30	A	1	15(a)	Agriculture	2	1	1		1	2	1	
31	A	1	15(b)	Agriculture	1	1	1				2	
32	A	1	16	Agriculture	1	1	1	1	1	1		
33	B	0	1	TTT	2	1	1			1	1	
34	B	0	2	Tax							2	
35	C	0	1	DataProcessing		1	1			5		1(8port)
36	C	0	2	STO	1	1	1			1		
37	C	0	3	Industry	1	1	1		1	1		
38	C	0	4	Conference							1	
39	C	1	1	IT&M		1						
40	C	1	2	SSM		1				1		
41	C	1	3	SSO	1	1	1		1	1		
42	C	1	4	Tax	2	1	1		1	2	1	
43	C	1	5	IT&M	2	1	1		1			1(16port)
44	C	1	6	SSM		1			1	1		
45	C	1	7	IT&M	3	2	2		1	1		
46	C	1	8	RSO	2	1		1	1	1		
47	C	1	9	TTT	1	1	1	1	1	1		
48	D	0	1	Industry		1						
49	D	0	2	Industry	2	2	1		1	1		
50	D	0	3	Industry							2	
51	D	0	4	Industry	2					2	2	
52	D	0	5	Industry							1	
53	D	0	6	Industry							1	1(8port)
Total					55	47	33	7	23	58	28	

Cost comparison among selected computer service provider for NBS LAN Expansion July 2003

A. Unit Price(US\$) of some items

S/N	ITEM	CC	UCC	Soft-tech	Micronix	FM
1	D-Link 24 switch	173.00	300.00			
2	D-Link 16 switch		240.00			305.00
3	D-Link 8 switch		120.00			180.00
4	3com 24 switch				390.00	
5	3com 16 switch					
6	3com 8 switch					
7	9U Rack cabinet	168.00	250.00			
8	UTP cable Cat5e	75.00	50.00		75.00	180.00
9	RJ45 connectors	0.25	0.30		0.50	
10	Wall socket	4.10	11.00		11.50	11.50

B. Total cost of some items in Minimum Installation(This is for the addition of 35 network points)

S/N	ITEM	CC	UCC	Soft-tech	Micronix	FM
1	Trunking	411.80		400.00	1,600.00	1,066.00
2	UTP cable Cat5e	300.00		600.00	375.00	360.00
3	Labour	650.00		2,090.00	1,925.00	300.00
4	Miscellaneous	100.00		120.50		250.00
5	Grand Total(inc.VAT)	2,828.16		6,976.86	6,113.00	3,949.20
6	Warranty period	1 year			1 year	1 year

C. Total cost of some items in full Installation(This is for restructuring whole network)

S/N	ITEM	CC	UCC	Soft-tech	Micronix	FM
1	Trunking	703.40	850.00	513.70	2,000.00	
2	UTP cable Cat5e	675.00	500.00	688.52	975.00	
3	Labour	950.00	3,500.00	3,028.00	3,750.00	
4	Miscellaneous	150.00	117.00	450.00		
5	Grand Total(inc.VAT)	4,322.64	9,622.80	10,438.24	10,563.00	
6	Warranty period	1 year	1 year		1 year	

Abbreviations

CC

UCC

FM

Computer Centre [Tz] Ltd

University of DSM Computing Centre

FM Communications Ltd

NBS Head Quarter, OfficeID, Extension No & Computer Allocation(July, 2003)

S/N	Section	Name of Employee	Designation	EXT.NO	Building ID	Floor	Office No	Number of Network Cable	Number of Printer	Number of Computer
1	Director General	Cletus Mkal	Director General	104	A	1	9	1		2
2		Afadhali Mzeru	P/Secretary	107	A	1	9	1	1	2
3		Victoria Msonge	P/Secretary							
4	Directorate of Statistical Operations	Hamisi Mbaruku	Director	105	A	1	10	2	1	2
5	Dep.of Field OPS, CRE & GEO INF	Margareth Maganda	Kinondoni - RSO	230	C	1	8		1	1
6		Leo Maganda	Book Binder	130	A	0	2			
7	Dep.of Stat. Method and Standard	Redegunda Maro	Acting Manager	123	C	1	6	1		1
8		Mathias Masuka	Sen. Stat.	223	C	1	2	1		1
9	Directorate of Social Statistics	Abdulrahman Kaimu	Director	121	A	1	5		1	2
10	Dep.of Labour & Price Statistics	Iddi Mwenda	Acting Manager	109	A	1	1	1	1	2
11		Ephraim Kwesigabo	Sen. Stat.	126	A	1	2		1	2
12		Mhidini Mtindo	Sen. Stat.							
13		Rukia Dingwaya	Sen. Stat. Off.							
14		Opiyo Marnu	Stat. Off.							
15	Dep.of Tax Statistics	William Ndossi	Sen. Stat.	132	C	1	4	1	1	2
16		Joshua Mwaisemba	Computer Analyst							
17	Directorate of Economic Statistics	Ally Araba	Director	115	A	1	11	1		2
18	Dep.of National Accounts	Ireneus Komba	Acting Manager	112	A	1	13	1	1	2
19		Morrice Oyuke	Sen. Stat.	118	A	1	12	3	1	5
20		Adella Ndesangia	Stat.							
21		Ado	Consultant							
22	Dep.of Trade, Transport, Tourism & Migration Statistics	Mathew Chimtembo	Acting Manager	110	C	1	9		1	1
23		Valerian Tesha	Sen. Stat.	218	B	0	1	1		1
24		Stephen Maganda	Stat.							
25	Dep.of Industry & Construction Statistics	Joy Sawe	Acting Manager	219	C	0	3	1	1	1
26		Philemon Mahimbo	Sen. Stat.	224	D	0	2	2	1	1
27		Zacharia Kilele	Sen. Stat.							
28		Sylvia Meku	Sen. Stat.	231	D	0	4			2
29		Fadhili Halfani	Stat. Off.							
30	(Data Processing)				D	0	6			
31	Dep.of Agricultural Statistics	Aidegunda Komba	Acting Manager	108	A	1	16	1	1	1
32		Joyce Urasa	Sen. Stat.	225	A	1	15	2	1	2
33		Luhil Gambamala	Sen. Stat.							

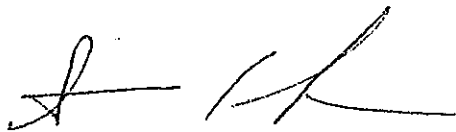
S/N	Section	Name of Employee	Designation	EXT.NO	Building ID	Floor	Office No	Number of Network Cable	Number of Printer	Number of Computer
34	Directorate of Finance, Administration & Marketing	Festo Muhula	Director	103	A	1	3	1	1	2
35	Dep. of Finance	John Kitoy	Acting Manager	113	A	1	8		1	1
36		(Andrew Mwakajilia)	Acct.					2		2
37		Lilian Karumuna	Acct.							
38		Eva Shoo	Acct. Asst.							
39		Stella Maka	Stat. Off.							
40		Nuru Zittu	Sen. Supp. Off.	220	C	1	3	1	1	1
41		Gervas Sukwa	Supp. Off.	226	C	0	2	1		1
42	Dep. Marketing & Information Technology	Amina Said	Manager		A	0	1			
43		Ramadhani Mbega	Stat. Off.	117	A	0	3	1	1	1
44		Mary Lubuva	library	117	A	0	5	1		1
45		Jane Mwangi	TSED DMA	111	A	1	4	1	1	2
46		Ota Akira	JICA Volunteer	119	A	1	14	1	1	1
47		Gregory Millinga	Sen. Stat.	222	C	1	5	2	1	1
48		George Mockray	Stat. Off.							
49		Emilian Karugendo	Stat.	229	C	1	7	2	1	2
50		Mlemba Abbasy	Stat.							
51		Elide Mwanri	Stat							
52		Ruth Minja	Stat.							
53		Novat Buberwa	Sen. Stat.		C	1	1	1		
54	NBS Server & 2 Switching Hubs				A	1	10			
55	Data Processing			122	C	0	1	1		5
56	Dep. Personnel & Administration	Gabriel Madembwe	Manager	106	A	1	7	1		1
57		Justine Massawe	Personnel & Admn. Off.	232						1
58	Open Registry	Rodian Mbwambo	Office Superv.	124	A	1	6			1
59		Paskalina Matandu	Office Superv.							
60		Loveness Ishika	R/Clerk							
61		Agens Lilanga	R/Clerk							
62	Switching Board	Eliada Magoma	Tel. Operator	101						
63		Agens Panga	R/Clerk	102						

RECORD OF DISCUSSIONS
BETWEEN
JAPAN INTERNATIONAL COOPERATION AGENCY
AND
THE AUTHORITIES CONCERNED
OF THE GOVERNMENT OF THE UNITED REPUBLIC OF TANZANIA
ON
THE PROJECT FOR STRENGTHENING OF CAPABILITIES OF THE
NATIONAL BUREAU OF STATISTICS IN DATA PROVIDING SERVICE
IN
TANZANIA

The Resident Representative of Japan International Cooperation Agency (hereinafter referred to as "JICA") in Tanzania had a series of discussions with Tanzanian Authorities concerned in respect of the desirable measures to be taken by both Governments for the successful implementation of the Project for strengthening of capabilities of The National Bureau of Statistics in Data Providing Service.

As a result of the discussions, JICA and the Tanzanian Authorities concerned agreed to recommend to their respective Governments the matters referred to in the document attached hereto.

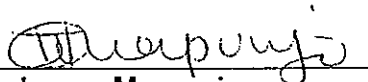
Dar es Salaam, December 23, 2003



Mr. Sumio Aoki
Resident Representative
Japan International Cooperation
Agency, Tanzania Office



Mr. Cletus Mkai
Director-General,
National Bureau of Statistics
United Republic of Tanzania



Ms. Joyce Mapunjo
Commissioner
Ministry of Finance
United Republic of Tanzania

THE ATTACHED DOCUMENT

I. COOPERATION BETWEEN JICA AND TANZANIAN GOVERNMENT

1. The Government of Tanzania will implement the Project on strengthening of capabilities of the National Bureau of Statistics in Data Providing Service (hereinafter referred to as "the Project") in cooperation with JICA.
2. The Project will be implemented in accordance with the Master Plan, which is given in Annex I.

II. MEASURES TO BE TAKEN BY JICA

In accordance with the laws and regulations in force in Japan and the provisions of Article III of the Agreement, JICA will take, at its own expense, the following measures according to the normal procedures under the technical cooperation scheme of Japan.

1. DISPATCH OF JAPANESE EXPERTS

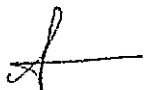
JICA will provide the services of the Japanese experts listed in Annex II.

2. PROVISION OF MACHINERY AND EQUIPMENT

JICA will provide such machinery, equipment and other materials (hereinafter referred to as "the Equipment") necessary for the implementation of the Project as listed in Annex III. The Equipment will become the property of the Government of Tanzania upon being delivered C.I.F. to the Tanzanian authorities concerned at the ports and/or airports of disembarkation.

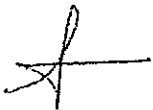
3. TRAINING OF TANZANIAN COUNTERPART PERSONNEL IN JAPAN

JICA will receive Tanzanian counterpart personnel connected with the Project for technical training in Japan.



III. MEASURES TO BE TAKEN BY THE GOVERNMENT OF TANZANIA

1. The Government of Tanzania will take necessary measures to ensure that the self-reliant operation of the Project will be sustained during and after the period of Japanese technical cooperation through the full and active involvement in the Project of all related authorities, beneficiary groups and institutions.
2. The Government of Tanzania will ensure that the technologies and knowledge acquired by Tanzanian nationals as a result of Japanese technical cooperation will contribute to the economic and social development of the United Republic of Tanzania.
3. The Government of Tanzania will grant in Tanzania privileges, exemptions and benefits as listed in Annex IV and will grant privileges, exemptions and benefits no less favourable than those granted to experts of third countries or international organizations performing similar missions to the Japanese experts referred to in II-1 above and their families.
4. The Government of Tanzania will ensure that the Equipment referred to in II-2 above will be utilized effectively for the implementation of the Project in consultation with the Japanese experts referred to in Annex II.
5. The Government of Tanzania will take necessary measures to ensure that the knowledge and experience acquired by the Tanzanian personnel from technical training in Japan will be utilized effectively in the implementation of the Project.
6. In accordance with the laws and regulations in force in the United Republic of Tanzania, the Government of Tanzania will take necessary measures to provide at its own expense:



- a) Services of the Tanzanian counterpart personnel and administrative personnel as listed in Annex V;
 - b) Land, buildings and facilities as listed in Annex VI;
 - c) Supply or replacement of machinery, equipment, instruments, vehicles, tools, spare parts and any other materials necessary for the implementation of the Project other than the Equipment provided by JICA under II-2 above;
 - d) Means of transport and travel allowances for the Japanese experts for official travel within the United Republic of Tanzania; and
 - e) Suitably furnished accommodation for the Japanese experts and their families.
7. In accordance with the laws and regulations in force in the United Republic of Tanzania, the Government of Tanzania will take necessary measures to meet:
- a) Expenses necessary for transportation within the United Republic of Tanzania of the Equipment referred to in II-2 above as well as for the installation, operation and maintenance thereof;
 - b) Customs duties, internal taxes and any other charges, imposed in the United Republic of Tanzania on the Equipment referred to in II-2 above; and
 - c) Running expenses necessary for the implementation of the Project (e.g. internet service, electricity, water, telephone etc.)



IV. ADMINISTRATION OF THE PROJECT

1. Director-General, the National Bureau of Statistics (hereinafter referred to as "NBS"), as the Project Director, will bear overall responsibility for the administration and implementation of the Project.
2. Director, Department of Finance, Administration & Marketing, NBS, as the Project Manager, will be responsible for the managerial and technical matters of the Project.
3. The Japanese Experts will provide necessary recommendations and advice to the Project Director and the Project Manager on any matters pertaining to the implementation of the Project.
4. The Japanese Experts will give necessary technical guidance and advice to the Tanzanian counterpart personnel on technical matters pertaining to the implementation of the Project.
5. For the effective and successful implementation of technical cooperation for the Project, a Joint Coordinating Committee will be established whose functions and composition are described in Annex VII.

V. JOINT EVALUATION

Evaluation of the Project will be conducted jointly by JICA and the Tanzanian authorities concerned, during the last six months of the cooperation term in order to examine the level of achievement.



VI. CLAIMS AGAINST JAPANESE EXPERTS

The Government of Tanzania undertakes to bear claims, if any arises, against the Japanese experts engaged in technical cooperation for the Project resulting from, occurring in the course of, or otherwise connected with the discharge of their official functions in the United Republic of Tanzania except for those arising from the willful misconduct or gross negligence of the Japanese experts.

VII. MUTUAL CONSULTATION

There will be mutual consultation between JICA and the Tanzanian Government on any major issues arising from, or in connection with this Attached Document.

VIII. MEASURES TO PROMOTE UNDERSTANDING OF AND SUPPORT FOR THE PROJECT

For the purpose of promoting support for the Project among the people of the United Republic of Tanzania, the Government of Tanzania will take appropriate measures to make the Project widely known to the people of the United Republic of Tanzania.

IX. TERM OF COOPERATION

The duration of the technical cooperation for the Project under this Attached Document will be three (3) years from the date of first arrival of the Japanese expert.



List of Annexes

- ANNEX I MASTER PLAN
- ANNEX II LIST OF JAPANESE EXPERTS
- ANNEX III LIST OF MACHINERY AND EQUIPMENT
- ANNEX IV PRIVILEGES, EXEMPTION AND BENEFITS FOR JAPANESE EXPERTS
- ANNEX V LIST OF TANZANIAN COUNTERPART AND ADMINISTRATIVE PERSONNEL
- ANNEX VI LIST OF LAND, BUILDINGS AND FACILITIES
- ANNEX VII JOINT COORDINATING COMMITTEE



ANNEX I: MASTER PLAN

1. Overall Goal

Statistical information is fully utilized in the process of policy and implementation with regard to poverty reduction in Tanzania.

2. Project Purpose

NBS is able to provide policy makers, administrators, academicians, NGOs, development partners, and other general public with more reliable statistical data in a timely manner.

3. Output of the Project

3.1 NBS Integrated Statistical Database System (ISD)" is established and operated appropriately.

3.2 Statistical Library will acquire the capacity to compile and disseminate the statistical data such as statistical abstracts and other publications.

3.3 Users of statistical data (Officers of NBS Regional Office, line ministries, etc.) will be able to use the Database appropriately.

4. Activities of the Project

4.1 "NBS Integrated Statistical Database System (ISD)" is established and operated appropriately.

4.1.1 Formulation of marketing strategy, and formulation of regulation on management of statistical database and dissemination of statistical data

4.1.2 Formulation of the regulation on Network management and utilization

4.1.3 Installation of necessary equipment

4.1.4 Data management software for storing and utilizing statistical data from ISD

4.1.5 On-the-job training for utilization of data extraction software

4.1.6 General training for database utilization

4.1.7 Sub-databases for each statistical surveys are to be created



4.1.8 methodology of data-processing of relevant statistical surveys is to be imparted to NBS staff.

4.1.9 LAN system connecting between main office and census office, including Vsat, is installed.

4.1.10 On-the-job training for statistical application of IT (including formulation and updating of homepage)

4.2 Statistical Library will acquire the capacity to compile and disseminate the statistical data such as statistical abstracts and other publications.

4.2.1 Formulation of the regulation on statistical library operation and utilization

4.2.2 Installation of necessary equipment for statistical library

4.2.3 On-the-Job training on statistical library operation and management of statistical documents using IT

4.2.4 On-the-Job training on basic knowledge on statistics for statistical consultation

4.2.5 Scanning of existing statistical data in the NBS past publications to be stored in ISD

4.2.6 Selection of necessary statistical publications in NBS statistical library and procurement of them

4.2.7 Training on the methodology for compiling and printing general statistical publications

4.3 Users of statistical data (Officers of NBS Regional Office, line ministries, etc.) will be able to use the Database appropriately.

4.3.1 Preparation of textbook for training on utilization of statistical data in each field of statistics

4.3.2 General training and training on each field of statistics

5. PROJECT SITE

National Bureau of Statistics, Dar es Salaam, Tanzania

Note: In cases where the Master Plan is needed to be modified according to changes in preconditions for the Project, both sides will agree upon and confirm such modifications by exchanging Minutes of Meetings.



ANNEX II: JAPANESE EXPERTS

1. Long Term Experts

(1) Database System

2. Short Term Experts

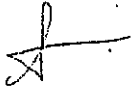
(1) Statistical Data Management

(2) Statistical Data Processing in the field of labor, household, population census, industry, agriculture, housing, DHS, etc.

(3) Statistical Library/editing

(4) Utilization and analysis of statistics

(5) Other experts will be dispatched when necessary according to the requirements within this framework.



ANNEX III: LIST OF MACHINERY AND EQUIPMENT

1. Machinery and equipment for database system

(1) SQL server,

(2) Client PC

(3) Other equipment necessary for database system

2. Equipment for establishment of LAN and VSAT

3. Equipment for library

(1) Personal Computer

(2) Printer

(3) Scanner


(4) Other equipment for library



ANNEX IV: PRIVILEGES, EXEMPTION AND BENEFITS FOR JAPANESE EXPERTS

In accordance with the laws and regulation in force in the United Republic of Tanzania, the Government of the United Republic of Tanzania will grant the following:

1. To exempt from income tax and other charges of any kind imposed on or in connection with the living allowances remitted from abroad for the Japanese experts.
2. To exempt from customs duty, VAT and any other charges imposed on personal household effects of the Japanese experts and their families, including one motor vehicle per expert.
3. To facilitate medical and other necessary assistance to the Japanese experts and their families.
4. To issue, upon application, entry and exit visas for the Japanese experts and their families free of charge.
5. To issue identification cards to the Japanese experts and their families to secure the cooperation of all governmental organizations necessary for the performance of the duties of the experts.
6. To exempt from customs duties and VAT for import and VAT and re-export of machinery and equipment by the Japanese experts in connection with the Project activities.



ANNEX V: LIST OF COUNTERPART AND ADMINISTRATIVE PERSONNEL

1. Project Director:

Director-General, National Bureau of Statistics (NBS)

2. Project Manager:

Director, Department of Finance, Administration & Marketing, NBS

3. Counterpart Personnel

3-1. Manager, IT Department, NBS and staff of IT Division

3-2. Managers and staff of Departments concerned with statistical surveys

3-3. Staff of Statistical library of NBS

4. Administrative Personnel

5. Agencies concerned

5-1. President Office Planning and Privatization

5-2. Vice President's Office

5-3. Other data collecting agencies

6. Other personnel mutually agreed upon as necessary



ANNEX VI: LIST OF BUILDINGS, AND FACILITIES

1. Land, buildings, and facilities necessary for the implementation of the Project
2. Rooms and space necessary for installation and storage of the Equipment
3. Office space and necessary facilities for the Japanese experts and related staff members
4. Other facilities mutually agreed upon as necessary



ANNEX VII: JOINT COORDINATING COMMITTEE

1. FUNCTION

The Joint Coordinating Committee, composed of members listed in 2 below, will meet at least once a year and whenever the necessity arises in order to fulfill the following functions:

- 1.1 To adopt the Annual Work Plan under the framework of the Record of Discussions.
- 1.2 To review the overall progress of the technical cooperation program as well as achievement of the Annual Work Plan of the Project
- 1.3 To review measures taken by JICA:
 - 1.3.1 Dispatch of Japanese experts
 - 1.3.2 Acceptance of counterpart personnel in Japan for training
 - 1.3.3 Provision of Equipment
- 1.4 To review measures taken by the Government of Tanzania:
 - 1.4.1 Allocation of necessary budget (including local cost expenditures)
 - 1.4.2 Allocation of necessary counterpart personnel
 - 1.4.3 Utilization and administration of Equipment provided by JICA
- 1.5 To make recommendations to JICA and the Tanzanian Government on:
 - 1.5.1 Budgetary matters
 - 1.5.2 Recruitment and appointment of counterpart personnel
 - 1.5.3 Selection and effective utilization of machinery and equipment
 - 1.5.4 Appropriate dispatch of Japanese experts
 - 1.5.5 Acceptance of counterpart personnel in Japan and/or in the third countries for training
 - 1.5.6 Others

2. COMMITTEE COMPOSITION

(1) Chairperson:


Project Director

(2) Members:

1) Tanzanian side

a. Project Manager


b. Management Team consisted of all Directors of NBS


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- c Counterpart
 - d. Representatives from other relevant authorities
- 2) Japanese side:
- a. Experts assigned to the Project
 - b. Other Japanese experts and personnel concerned dispatched by JICA, if necessary
 - c. Resident Representative of the JICA Tanzania Office

Notes:

- 1) Officials of the Embassy of Japan may attend Joint Coordinating Committee meetings as observers.
- 2) Persons who are nominated by the Chairperson may attend Joint Coordinating Committee meetings.




MINUTES OF MEETING
BETWEEN
JAPAN INTERNATIONAL COOPERATION AGENCY
AND
THE AUTHORITIES CONCERNED OF THE GOVERNMENT OF
THE UNITED REPUBLIC OF TANZANIA
ON
JAPANESE TECHNICAL COOPERATION
FOR
THE PROJECT FOR STRENGTHENING OF CAPABILITIES OF THE
NATIONAL BUREAU OF STATISTICS IN DATA PROVIDING SERVICE
IN
TANZANIA

Resident Representative of Japan International Cooperation Agency (hereinafter referred to as "JICA") Tanzania Office had a series of discussions with the Tanzanian authorities concerned about the formation of the Project for Strengthening of Capabilities of the National Bureau of Statistics in Data Providing Service in the United Republic of Tanzania (hereinafter referred to as "the Project").

As a result of the discussions, Resident Representative of JICA Tanzania Office and the Tanzanian authorities concerned agreed to report to JICA and the Tanzanian Governments the matters referred to in the document attached hereto.

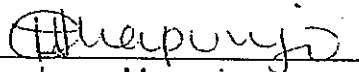
Dar es Salaam, Tanzania, December 23, 2003



Mr. Sumio Aoki
Resident Representative,
JICA Tanzania Office,
Japan International Cooperation Agency



Mr. Cletus Mkai
Director-General,
National Bureau of Statistics
United Republic of Tanzania



Ms. Joyce Mapunjo
Commissioner
Ministry of Finance
United Republic of Tanzania

ATTACHED DOCUMENT

I. PROJECT DESIGN MATRIX

The Project Design Matrix (hereinafter referred to as "PDM") is commonly used in Japanese technical cooperation in order to manage and implement Projects efficiently and effectively. It will also be used as a reference for monitoring and evaluating the Project.

As a result of discussions, both sides agreed to apply the PDM as shown in ANNEX I to the Project with the following understanding.

1. The PDM is a logically designed matrix that defines the initial understanding of the framework of technical cooperation for the Project and indicates the logical steps toward the achievement of the Project purpose.
2. The PDM is to be flexibly revised according to the progress and achievements of the Project, upon agreement on the Joint Coordinating Committee.

II. PLAN OF OPERATION

The Plan of Operation has been tentatively formulated according to the Record of Discussions. The Plan of Operation for the whole period is shown in ANNEX II.

The Annual Plan of Operation is to be drafted by the Tanzanian counterparts and the Japanese experts and is to be submitted to the Joint Coordinating Committee. The activities are subject to change within the scope of the Record of Discussions, if the necessity arises during the course of the Project implementation.

III. STRUCTURE OF PROJECT IMPLEMENTATION

The chart of Project implementation is given ANNEX III.

IV. MEASURE TO BE TAKEN BY THE GOVERNMENT OF TANZANIA

With reference to item III-6-(d) and (e) of Record of Discussion for the Project, the Tanzanian side requested the Japanese side to cover a part of expenses, although the Tanzanian side understood that all the expenses of the Project should be covered by own side.



ANNEX I
ANNEX II
ANNEX III

PROJECT DESIGN MATRIX
PLAN OF OPERATION
CHART OF PROJECT IMPLEMENTATION



ANNEX I

Duration: Jan., 2003~Jan., 2007

Project Design Matrix (PDM)
 Project Title: Project for strengthening of National Bureau of Statistics in Data Processing Services
 Implementing Agency: National Board of Statistics, Presidential Office Planning and Privatization
 Target Group: Statistical Officers in NBS

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
<p>Overall Goal Statistical information is fully utilized in the process of policy and implementation with regard to poverty reduction in Tanzania.</p> <p>Project Purpose NBS is able to provide policy makers, administrators, academicians, NGOs, development partners, and other general public with more reliable statistical data in a timely manner.</p>	<p>1 Usage of statistical data in the policy documents (number of quotation from survey results from NBS publications)</p> <p>1 Number of users of NBS library 2 Number of users who ask for NBS for data provision 3 Number of sales of statistical publications 4 Number of access to NBS web page 5 Satisfaction of users (research institute, line ministries, donors, etc.)</p>		
<p>OUTPUTS 1 "NBS Integrated Statistical Database System (ISD)" is established and operated appropriately.</p> <p>2 Statistical Library will acquire the capacity to compile and disseminate the statistical data such as statistical abstracts and other publications through its own web site and library.</p> <p>3 Users of statistical data (Officers of NBS Regional Office, line ministries, etc.) will be able to use the Database appropriately.</p>	<p>1-1 Condition and updating record of ISD 1-2 Updating record of ISD</p> <p>2-1 Utilization of statistical library 2-2 Number of statistical publications 2-3 Condition of updating of web page</p> <p>3-1 Number of training courses conducted 3-2 Extent of understanding by the trainees</p>	<p>1 2 3</p>	
<p>Activities 1 "NBS Integrated Statistical Database System (ISD)" is established and operated appropriately. 1-1 Formulation of marketing strategy, and formulation of regulation on management of statistical database and dissemination of statistical data 1-2 Formulation of the regulation on Network management and utilization 1-3 Installation of necessary equipment 1-4 Data management software for storing and utilizing statistical data from ISD 1-5 On-the-job training for utilization of data extraction software 1-6 General training for database utilization 1-7 Sub-databases for each statistical surveys are to be created 1-8 methodology of data-processing of relevant statistical surveys is to be 1-9 LAN system connecting between main office and census office, including Vsat, is installed. 1-10 On-the-job training for statistical application of IT (including formulation and updating of homepage) 2 Statistical Library will acquire the capacity to compile and disseminate the statistical data such as statistical abstracts and other publications 2-1 Formulation of the regulation on statistical library operation and utilization 2-2 Installation of necessary equipment for statistical library 2-3 On-the-job training on statistical library operation and management of statistical documents using IT 2-4 On-the-job training on basic knowledge on statistics for statistical 2-5 Scanning of existing statistical data in the NBS publications in the past to be stored in ISD 2-6 Selection of necessary statistical publications in NBS statistical library and procurement of them 2-7 Training on the methodology for compiling and printing general statistical publications 3 Users of statistical data (Officers of NBS Regional Office, line ministries, etc.) will be able to use the Database appropriately. 3-1 Preparation of textbook for training on utilization of statistical data in each field of statistics 3-2 General training and training on each field of statistics</p>	<p>INPUTS</p> <p>Tanzanian Side Office space as well as data processing room and library Running cost for data processing room and library Office space for Japanese experts Assignment of counterpart personnel Approval for use of statistical data Cost for statistical publication Approval for use of governmental web pages operated by POPP</p> <p>Japanese Side Long-term Expert: 1 Short-term Experts: 16 Counterpart Training in Japan: 1</p> <p>Equipment: equipment for establishment of ISD and library</p>	<p>Pre-Conditions Decision makers recognize the importance of statistical information.</p>	

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PLAN OF OPERATIONS FOR WHOLE PERIOD
Project for strengthening of National Bureau of Statistics in Data Providing Services in Tanzania

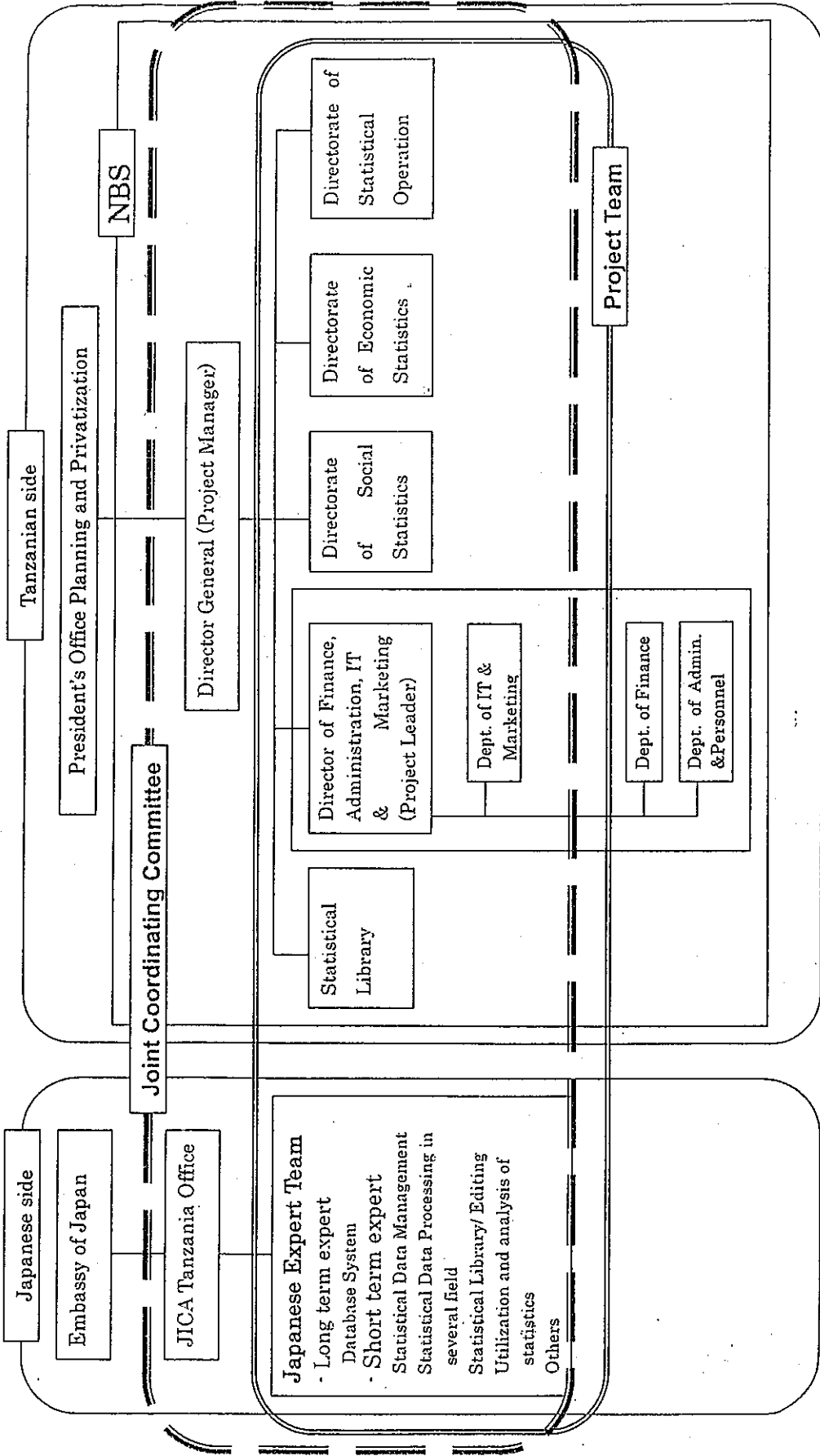
Activities	E/SP	2004												2005												2006											
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
1.1	Director General, Director of Administration	Statistical Data Management																																			
1.2	Director General, Director of Administration (POPP)	Statistical Data Management, Database System																																			
1.3	Dept. of IT (Local)	Database System																																			
1.4	Dept. of IT (Local)	Database System																																			
1.5	Dept. of IT (Local)	Database System																																			
1.6	Dept. of IT (East African Statistical Centre)	Statistical Data Management, Database System																																			
1.7	Depts concerned with statistical surveys	Statistical Data Processing, Utilization and Analysis of STATISTICS																																			
1.8	Dept. of IT (Depts concerned with statistical surveys)	Statistical Data Processing																																			
1.9	Dept. of IT	Database System																																			
1.10	Dept. of IT	Database System																																			
2		Capacity Building for Statistical LIBRARY																																			
2.1	Statistical Library	Statistical Data Management, Statistical Library/Editing																																			
2.2	Statistical Library	Database System																																			
2.3	Statistical Library	Statistical Library/Editing																																			
2.4	Statistical Library	Statistical Data Management, Utilization and Analysis of Statistics																																			
2.5	Statistical Library (Local)	Statistical Library/Editing, Database System																																			
2.6	Statistical Library	Statistical Data Management, Statistical Library/Editing																																			
2.7	Statistical Library	Statistical Library/Editing																																			
3		Training for utilization of ISB																																			
3.1	Depts concerned with statistical surveys, East African Statistical Training Centre	Preparation of textbook for training on utilization of statistical data in each field of statistics																																			
3.2	Depts concerned with statistical surveys, East African Statistical Training Centre	General training and training on each field of statistics																																			

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CHART OF PROJECT IMPLEMENTATION



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