



Republic of the Philippines  
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS  
**OFFICE OF THE SECRETARY**  
Manila

097.13 DPWH  
03.27.2007

**MAR 27 2007**

**DEPARTMENT ORDER** )  
No. 22 )  
Series of 2007 )  
03.27.07 )

**SUBJECT: Redefining the Duties and Responsibilities of Central, Regional and District Offices in the Implementation of the Communication Network and Application Systems**

In line with our effort to conduct continuing review of the duties and responsibilities of offices involved in the implementation of the Department Wide Area Communication Network and in order that the said communication system will be used in a manner that is cost effective and supportive of the objectives of the Department, the duties and responsibilities of the Central, Regional and District Offices in the implementation of the DPWH Communication Network and Application Systems are hereby redefined as follows:

Section 1. Definition of Terms - For purposes of this Department Order, the following terms shall mean as defined below:

- A. Structured cabling – medium of data communication such as, but not limited to, fiber optic cables, unshielded twisted pairs, conduits, connectors and wall jacks.
- B. Network equipment – devices used in computer network such as, but not limited to, servers, hubs, routers, modems/multi-plexers, automatic voltage regulator, and uninterrupted power supply, computers and other peripherals.
- C. Call accounting – the system of monitoring outgoing calls.
- D. Server – a computer that provides services to the network.
- E. Network communication – the transfer of information among interconnected computers.
- F. Genset – generator set for power supply in case of power interruption.
- G. PBX – Private Access Branch Exchange – equipment which facilitates the voice communication network.
- H. Leased line – dedicated line/connection between two (2) different offices.

Section 2. Duties and Responsibilities

A. Regional Directors and District Engineers

1. Assign a full time staff who shall act as the:
  - a. Regional/District Network/System Administrator;

- b. Regional/District IT Help Desk Officer/Technician; and,
- c. Regional Application Support Person.
- 2. Accept, sign delivery receipts, and ensure responsibility and accountability of the network equipment, structured cabling, and other facilities for the network configuration; and,
- 3. Ensure that this Department Order and Department Order 20, Series of 2007, are followed accordingly.

**B. Central/Regional/District Network/System Administrators**

- 1. Manage and maintain the wide area network which includes the network infrastructure enterprise servers and technology for both voice and data;
- 2. Ensure that mission-critical networks are operational and that downtimes, if unavoidable, are reduced to the minimum;
- 3. Ensure the security of the network equipment, structured cabling and the network room;
- 4. Provide support for application deployment, including application distribution and configuration management;
- 5. Ensure that the required routine maintenance works on all IT facilities and equipment are performed hereunder listed in Annex 'A' of this Department Order.
- 6. Ensure that the standby generator and air conditioning unit are to be used strictly for the network room only;
- 7. Troubleshoot problems of the network jurisdiction;
- 8. Coordinate activities with the Central Office Network and System Administrators; and,
- 9. Perform other duties as may be appropriate upon direction and mandate from MIS.

**C. Regional/District IT Help Desk Officers/Technicians**

- 1. Help users in the resolution of ICT problems;
- 2. Track ICT problems and recommend enhancements and training problems;
- 3. Ensure that work stations and other peripherals are operational and that downtimes, if unavoidable, are reduced to minimum;
- 4. Administer call accounting on the telephone system;
- 5. Submit Monthly Report to the Chief, IT Help Desk Section, MIS every 1<sup>st</sup> working day of the following month.

**D. Regional Application Support Persons**

- 1. Provide application user support services including user coordination;
- 2. Manage the Region's internet and intranet websites;
- 3. Provide support services to Regional web data sources.

E. Regional/District Administrative Officers

1. Direct and oversee the responsibilities of the Regional/District Network/System Administrators and IT Help Desk Officers/Technicians, and the Regional Application Support Persons;
2. Supervise and monitor the activities of Regional/District Network Administrator/System Administrators and IT Help Desk Officers/Technicians, and the Regional Application Support Persons.

Section 3. Cost – The cost involved in the operations of the communication network that would be shouldered by offices shall include the following:

A. Administrative and Manpower Management Service (AMMS):

1. Operation and maintenance expenses, which include fuel and oil cost for back up generator in Central Office.
2. Any cost involved in the operation and maintenance on monthly recurring charges of telephone services at the Central Office and all leased lines connecting the Central Office and the Regional Offices, and all leased lines connecting the Regional Offices and the District Offices.

B. Regional and District Offices:

1. One time installation cost and monthly recurring charges of telephone service;
2. Operation and maintenance expenses, which include fuel and oil cost for backup generators;
3. Any cost involved in movement or replacement of network equipment and cabling; and,
4. Additional network equipment for office expansion.

C. Bureaus, Services, Project Management Offices and other Offices:

1. Any cost involved in movement or replacement of network equipment and cabling;
2. Additional network equipment for office expansion; and,
3. Call usage costs for National and International Direct Dialing (NDD/IDD).

Section 4. Training – On-the-job training will be provided by the MIS to all Regional/District Network/System Administrators, IT Help Desk Officers/Technicians and Regional Application Support Persons as part of the implementation of the Communication Network and Application Systems. The MIS may provide additional training as the need warrants it.

This Order supersedes Department Order No. 248, s. 2002, Responsibilities of Central, Regional and District Offices in the Implementation of the Communication Network and Department Order No. 258, s. 2003, Responsibilities of Central, Regional, District Information (IT) Help Desk Officers.

This Order takes effect immediately.

  
**MANUEL M. BONOAN**  
Officer-In-Charge



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## **Annex 'A'**

### **Required Routine Maintenance Works on the following IT Facilities and Equipment**

#### **Network Room**

- a. The following should be performed on an ongoing basis:
  - always lock the network room;
  - maintain cleanliness constantly in the network room (all aspects);
  - ensure that there is nothing blocking cabinets / equipment so that airflow is proper;
  - ensure that all miscellaneous cabling is protected and properly installed;
  - ensure that all equipment is properly installed and functioning;
  - ensure that electrical outlets and lights are properly functioning;
  - ensure that roof has no leaks (this should be done frequently during heavy rains);
  - ensure that walls, floor, ceiling, doors have no holes (to keep rodents out);
  - maintain proper constant temperature and humidity in network room (should be 23 degrees C).

#### **Air Conditioning Units**

- a. Set the temperature at 23 degrees and leave it at that temperature or on window type, set temperature at about half, and fan at medium.
- b. Clean the air conditioning units at least monthly (filters, etc).
- c. Perform periodic maintenance quarterly on the air conditioning units including power washing (pull air cons out). Check refrigeration, drip pans, and other parts.

#### **Building Distributors (BDs) and Floor Distributors (FDs)**

- a. Ensure that BDs and FDs remain locked at all times.
- b. Perform inspection weekly of all BDs and FDs;
  - verify if everything is working, patched, and secure.
  - ensure that the BDs and FDs are secured and locked;
  - ensure that no items should be stored on top or the side or back of BDs and FDs.
- c. Clean all BDs and FDs every month.
  - vacuum the BDs and FDs to clean it of dust;

- clean the sides and top of the cabinets inside and outside, and all equipment;
  - clean behind (and sides) of BDs and FDs;
  - ensure that all exhaust fans are properly functioning;
  - check for holes in sides, floors, and top. If holes exist, patch or correct them;
  - look for evidence of rodents. If there is evidence, administer pest control. Determine source of rodents and eliminate source.
- d. When re-patching cabling inside the BDs and FDs, ensure that the correct color cable is used, and the old cable is removed. Ensure that new cable is tagged, and that the network documentation is updated.

### **Cable Patching in BDs and FDs**

- a. Label properly all patch cables;
- orange cables should be utilized for data. Cable should be on right side of BD or FD;
  - gray cables should be utilized for voice. Cable should be on left side of BD or FD;
- b. Ensure that all patch cables are properly installed in an organized manner.

### **Leased Lines**

- a. Perform daily monitoring on the leased line connections. The following should always be considered:
- when the leased line connection between the District Office and the Regional Office concerned bugged down and/or causing an intermittent connection, the Regional Network Administrators concerned should report the incident immediately to their respective local network provider and the Central Network administrators, then monitor until connected;
  - when the leased line connection between any Regional Office and the Central Office bugged down and/or causing an intermittent connection, the Central Network Administrators should report the incident immediately to the concerned network provider then monitor until connected.
- b. Ensure that leased line connections should always be on its maximum operating condition.

### **Electrical**

#### **Genset**

- a. Perform periodic maintenance of Genset every six months. This should include:
- change oil;
  - change oil filter;

- drain and change coolant in radiator. Ensure that new coolant has proper amount of anti-corrosions/coolant;
- tune up Genset.
  - calibrate fuel injectors;
  - check/replace various air filters;
  - check carbon on alternator, if very thin, replace carbon.
- b. Perform periodic maintenance of Genset every month. This should include to:
  - check battery and battery charger to ensure they properly charged and operating correctly;
  - check all gauges/readings on the control panel of Genset to ensure that they are properly functioning. This includes:
    - RPM
    - Voltage
    - Ammeter
    - Water temperature
    - Oil gauge
    - Voltage of alternator
    - Hour meter
  - check electrical conduits and conduit connectors to see if loose or missing. If loose, correct these;
  - check Day Fuel tanks and lines for leaks. If leaking, have these corrected immediately;
  - drain Day tank and water separator if full of water or near full.
- c. Check all wiring monthly to ensure that it is secured and it has not been tapped into. If found that it has been tapped into, disconnect them, and take steps to ensure that it does not continue to occur.
- d. Check oil and water levels at least weekly or more frequently if Genset is running frequently.
- e. Ensure that circuit breakers are always on.

#### Automatic Transfer Switch (ATS)

- a. Ensure that ATS is set to automatic.
- b. Test ATS weekly, preferably on Saturday to ensure that it is functioning properly:
  - Switch off main electrical circuit breaker in powerhouse. Genset should automatically start. Let Genset run for one (1) hour, then turn main electrical circuit breaker back on, Genset should automatically turn off although there is usually a five-minute delay.
  - During the test, ensure that Genset is functioning properly. Ensure that all network equipment has power being properly supplied.

### **Powerhouse**

- a. Ensure that powerhouse remains locked at all times.
- b. Always maintain an adequate supply of diesel fuel.

### **Uninterruptible Power Supply (UPS)**

- a. Test all UPS every month by pulling the power cord.
- b. Let UPS run without power for ½ hour to see if properly functioning.
- c. If UPS is not functioning properly, immediately plug power back into UPS, and take steps to have UPS repaired immediately.

### **Cabling**

- a. Ensure that cabling stays secure. Conduct a physical inspection of all cabling every month.
  - ensure that cabling is in conduits / molding and not exposed. Correct if found;
  - cover pull boxes with screw;
  - ensure that conduits are properly connected to pull boxes with a clamp.
- b. Require that all offices notify the network administrator before cabling needs to be moved or relocated. Contact Monitoring and Information Service (MIS) when this is needed. Cabling should NEVER be cut.

### **PBX**

- a. Ensure call accounting procedures are followed.
- b. Test the batteries monthly to ensure they are charged.
- c. Test the PBX quarterly using batteries and rectifier.
- d. Clean the PBX monthly.
- e. Test the power supply monthly to ensure it is working properly.
- f. Perform a complete system backup on both PBXs monthly to floppy disk.
- g. Generate the system error report weekly.
- h. Review the report, and correct all errors.
- i. Generate updated phone directory including access permission.

**Data**

- a. Update active directory.
- b. Maintain an accurate manual log of users and access rights.
- c. Maintain an accurate inventory of all equipment.
- d. Maintain trouble logs of all problems. Ensure corrective action is taken. Analyze the logs periodically to determine areas that should be addressed further.
- e. Perform fine-tuning of software / hardware as necessary.
- f. Perform weekly tape backups of all servers.
- g. Periodically monitor mailbox (E-mail) sizes.
- h. Periodically monitor network traffic.