



**GUAM TELECOMMUNICATIONS  
ACT OF 2004**

**DOCKET 05-01**

**MINIMUM TECHNICAL STANDARDS**

These standards are adopted pursuant to 12 GCA § 12110 of the Guam Telecommunications Act of 2004. This section directs that the Guam Public Utilities Commission [PUC] adopt minimum technical standards for GTA Telecom LLC [GTA], including standards for construction and maintenance practices, adequacy of service, basic telephone service standards, customer lines standard performance characteristics, interexchange trunking connections, PBX and multichannel lines; trouble report response and adequacy of facilities.

**Rule 1. Acceptable Standards**

- a. GTA shall provide telecommunications service to the public in accordance with rules, service standards, and tariffs on file with PUC. Such service shall meet or exceed the standards set forth in these filings.
- b. GTA shall continually review its operations to assure the provision of adequate service.
- c. Unless otherwise specified by PUC, GTA shall use the applicable provisions in the following publications as standards of accepted practices for the planning, engineering, construction, maintenance, and administration of its plant:
  - 1. Company written practices and guidelines, and/or other written methods proven by long-term use.
  - 2. Rural Utilities Service (RUS) practices.
  - 3. National Electrical Safety Code, and National Electrical Code (current editions).

**Rule 2. Dial Service Requirements**

GTA shall provide sufficient dial switching equipment to meet the following minimum requirements at all times, including busy periods:

- a. Dial tone within the parameters specified in Rule 12(a).
- b. Complete dialing of called numbers on at least ninety-five (95) percent of telephone calls without encountering an equipment overflow condition within the local dialing area.

### **Rule 3. Transmission Requirements**

GTA shall furnish and maintain properly designed plant facilities to provide satisfactory circuit transmission of communications between customers. Circuit transmission shall have adequate volume levels and be free of excessive distortion. Levels of noise and cross talk shall be such as not to impair communications. The circuit transmission objectives set forth herein are based upon the use of standard telephone (500 type) sets connected to a 48-52 full float volt direct current supply. The minimum subscriber loop transmission objectives are as follows:

- a. 1,000 HZ loss: -8.5db or less.
- b. Loop circuit: not less than 20 ma.
- c. Circuit noise: 30db rnc or less.
- d. CKT balance: 50db or greater.
- e. Subscriber loops shall have a loop resistance not exceeding the supervision limit of the associated central office equipment, unless equipped with appropriate supervision extending devices to ensure that proper network control signaling and transmission is provided.

### **Rule 4. Provisions for Testing**

GTA shall provide test facilities, which will enable it to determine the operating and transmission capabilities of circuit and dial switching equipment, either for routine maintenance or for fault location. Test numbers shall be provided for the following equipment for each central office and/or toll center:

- a. A quiet termination.
- b. A 1,000 HZ generator.

## **Rule 5. Selective Ringing**

GTA shall have as an objective the provision of full service selective ringing for all telecommunications service.

## **Rule 6. Maintenance of Plant and Equipment**

- a. GTA shall adopt and pursue a preventive maintenance program aimed at achieving efficient operation of its system so as to permit the rendering of safe, adequate service performance. Broken, damaged or deteriorated parts, which are no longer serviceable shall be repaired or replaced. Adjustable apparatus and equipment shall be readjusted as necessary when found by preventative maintenance not to be in proper operating condition.
- b. GTA shall maintain records descriptive of its preventative maintenance program indicating work accomplished and planned, which is carried out on a routine periodic basis, for the various categories of equipment and plant.
- c. Work performed in response to trouble is not considered preventive maintenance.
- d. Every cable pair entering a central office shall be terminated on a main distributing frame (MDF) protector assembly or equivalent. Each cable pair shall be equipped with a protector module regardless of whether it is a working or non-working pair. Temporarily disconnected pairs shall not be left unprotected.
- e. Each mainframe protector assembly shall be bonded to the adjacent protector on that vertical, and the end protector bonded to the MDF Ground Bar (MDFB) with a #6 or larger copper conductor.
- f. All outside plant cables shall have their shields bonded to the cable entrance ground bar (CEGB), which is normally located close to the entrance location, or at the location of first opportunity (usually at the MDF).

## **Rule 7. Emergency Operations**

- a. GTA shall make reasonable provisions to meet emergencies resulting from failures of lighting or power service, sudden or prolonged

increase in traffic, illness of operators, or from fire, storm, or act of God, and GTA shall inform employees as to procedures to be followed in the event of emergency in order to prevent or mitigate interruption or impairment of telephone service.

- b. It is essential that all central offices and toll centers have adequate provisions for emergency power. Central offices that have twenty-four (24) hour maintenance coverage or have an automatic start engine alternator shall provide a minimum of three (3) hours of battery reserve. All other central offices shall have a minimum of eight (8) hours of battery reserve. There shall be a mobile/portable emergency generator available within the company, which can be delivered and connected on short notice. These central offices and generators shall be equipped with quick-connect connections.

#### **Rule 8. Service Interruption**

- a. GTA shall make all reasonable efforts to prevent interruptions of service. Arrangements shall be made to receive customer trouble reports twenty-four (24) hours daily and to clear troubles of an emergency nature at night and weekends, as well as during regular working hours, consistent with bona fide needs of the customer and personal safety of its personnel.
- b. GTA shall maintain an accurate record of trouble reports made by its customers. This record shall include appropriate identification of the customer, of service affected, the time, date and nature of the report, and action taken to clear trouble or satisfy the complaint and the date and time of trouble clearance or other disposition. This record shall be available to PUC or its authorized representatives upon request, and shall be retained for a minimum of twelve (12) months.
- c. All repair service commitments to customers shall be kept, unless customers are timely notified of unavoidable delays. If unusual repairs are required, or other factors preclude clearing of reported trouble promptly, reasonable efforts shall be made to notify affected customers.
- d. It shall be the service objective to so maintain the service that the average rate of customer trouble reports in each exchange is no greater than six [6] per 100 access lines.
- e. It shall be the service objective for repeated repair reports on the same

access line or related equipment occurring within one (1) month of the initial report to be no greater than eight (8) percent in each exchange.

- f. GTA shall maintain an accurate record of customer trouble reports and repeated repair reports for each exchange for the service objectives outlined in subsections (d) and (e) of this rule. This record shall be available to PUC, or its authorized representative, upon request, and shall be retained for a minimum of twelve (12) months.

### **Rule 9. Construction Work Near Utility Facilities**

Even though all contractors working in the vicinity of GTA's lines or structures are responsible for exercising due diligence in preventing damage to GTA's property or interruption to GTA service, GTA shall, when requested, furnish to contractors appropriate information concerning location of underground conduit, cable, and other equipment in order to prevent any interruption of service to telephone customers. Nothing in this rule is intended to affect the responsibility, liability or legal rights of any party under applicable laws or statutes.

### **Rule 10. Extensions of Service**

- a. GTA shall extend service to applicants within each exchange of the franchised area without a construction charge unless the cost to serve the applicant is prohibitively expensive. This will be determined by the provisions in GTA's tariff on file with PUC.
- b. GTA shall have a commercial forecast for each exchange area based upon historical as well as other pertinent data. This forecast shall include short term and long term forecasted data. The short term shall include five years of forecasted data. The long term shall be for a minimum period of 10 years. This information shall be filed with PUC on an annual basis and may be designated as "proprietary" and not available to the general public.
- c. GTA shall have a facility design for its franchised area, by exchange, to serve every usable residential or commercial building. This facility design shall be available upon request and will be updated each year showing projects in progress and projects to be worked the next twelve (12) months with estimated cost of the project, or if the bid has been let, the update shall include the actual cost of the project. This facility design will be filed with PUC.

- d. Any applicant desiring an extension to a proposed project requiring telephone service may be required to pay the entire cost (construction charge) of the extension. This will be determined by the provisions in GTA's tariff on file with PUC.
- e. Nothing contained herein shall be construed as to prohibit GTA from making at its expense greater extensions than herein prescribed should its judgment so dictate, provided like extensions are made to other customers under similar circumstances.
- f. Upon complaint to, and after an investigation by PUC, GTA may be required to construct extensions greater than provided for in its tariff upon a finding by PUC that such extension is reasonable.

**Rule 11. Safety**

- a. GTA shall adopt and execute a safety program fitted to the size and type of its operations. GTA shall observe all rules of the National Electrical Safety Code.
- b. GTA shall provide the following items in the telephone central office building located in the vicinity of the central office batteries and available for quick access:
  - 1. Central office battery, safety kit, to include:
    - (A) Eye wash kit.
    - (B) Rubber gloves.
    - (C) Apron.
    - (D) Goggles.
  - 2. First aid kit.

**Rule 12. Retail Quality of Service Standards**

- a. GTA shall use commercially reasonable efforts to meet the retail quality of service standard identified as the objective in the following table:

<i>Metric</i>	<i>Objective</i>	<i>Surveillance</i>
Primary Installation	90% < 5 days	85% < 5 days
Installation Primary Service Orders - Held Orders	Report actual number	

Line energizing	98% < 3 hours	95% < 3 hours
Customer Trouble Reports	< 6 per 100 lines	> 8 per 100 lines
Trouble Reports Cleared	95% < 48 hours	90% < 48 hours
Directory Assistance Answer Time	85% < 25 seconds	80% < 25 seconds
Repair Service Answer Time	85% < 25 seconds	80% < 25 seconds
Business Office Answer Time	85% < 25 seconds	80% < 25 seconds
Dialtone Acquisition Speed	98.5% < 3 seconds	97% < 3 seconds
Network Call Completion	98.5%	95%

- b. In the event GTA's service quality fails to meet the surveillance level, it shall file a report with PUC detailing specific plans for alleviating the service failure, including anticipated time lines.
- c. Service quality results by month are to be filed with PUC each quarter starting with the first quarter of 2008.
- d. PUC shall review these standards in twelve months from adoption to determine whether they are reasonable in light of actual performance levels.

**Rule 13. Deviations From Rules**

Upon written application showing good cause therefore, deviations from these rules may be permitted by order of PUC.