

MEMORANDUM CIRCULAR
NO. 1-04-88

**SUBJECT: RULES AND REGULATIONS GOVERNING EQUIPMENT
PROVIDED BY CUSTOMERS/SUBSCRIBERS OF PUBLIC
NETWORKS.**

Pursuant to the provisions of law and in accordance with the Public Service Act as amended, and with provision No. 10 of DOTC Circular 87-188, the National Telecommunications Commission hereby promulgates the following rules and regulation governing customer premises equipment (CPE) which may be supplied by a customer or a subscriber for connection to a public telecommunications network.

As used in this rules, Customer Premises Equipment (CPE) is/are equipment located in the premises of a customer or subscriber, for connection to public telecommunications network facilities, and shall be limited to equipment as enumerated in Table A.

Section 1 Purpose

- a. To define conditions and administrative procedures for the type approval of CPE.
- b. To define conditions, rules and regulations for the accreditation of CPE suppliers.
- c. To define the responsibilities of CPE suppliers;
- d. To define conditions under which customer supplied CPE may be allowed connection to a public telecommunication network; and
- e. To define the responsibilities of the network operator in so far as customer supplied CPE connected to network facilities are concerned.

Section 2. Type Approval

Type approval is a process by which CPE are evaluated for compatibility with the public telecommunications network to ensure that a certificate of type approval will be granted only to CPE which when connected will not result in harm, or will ensure adequate safety, to the said network.

A terminal equipment cause harm to the network when its connection to a public telecommunication network facility results in:

- irreversible damages to the network operators equipment;
- introduction of electrical hazards to telephone company personnel and to the public;
- malfunctioning of telecommunications company billing equipment;



- noise or crosstalk in facilities either due to longitudinal unbalance or excessive signal power;

or if the operation of the terminal equipment when connected to the network is characterized by:

- incorrect dial pulsing or DTMF signaling;
- marginal hookswitch supervision;
- excessive “High and Dry” false answer;
- absence of voice band transmission data for required call progress signals; and
- Inability to answer incoming call.

A CPE intended to be connected to a public telecommunications network shall be duly type approved as provided for in this Circular.

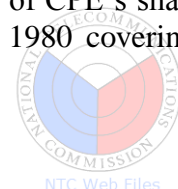
a. Type approval shall be required in the following cases:

- to type approve new types/classes, models of CPE intended to be connected to a public telecommunication network;
- modification or alteration of a previously type approved CPE or grandfathered CPE circuitry and/or its associated network interface; and
- Changes in trade name and or model number of previously type approved CPE.

b. Any CPE legally connected to a public telecommunications network prior to the approval and implementation of this Circular may remain connected to the public telecommunication network without further type approval unless subsequently modified.

c. All PBX equipment and accessories type approved under NTC Circular “Guidelines on PBX Interconnection” dated 23 October, 1980 shall be considered type approved unless subsequently modified.

d. An application for type approval certificates shall be filed with the Commission which shall undertake the type approval testing of the equipment at its laboratory or in the absence or inadequacy of the same, at a Commission designated laboratory capable of all the required test to determine whether a CPE is acceptable and safe for connection into public telecommunications network. Type approval shall be confined to physical and electrical characteristics presented by the CPE to the network. During the type approval proceedings, authorized technical representatives of the Commission, the network operators concerned, and the person, entity, corporation or agency requesting the type approval shall be present. However, during the first six (6) months of the approval of these circular during which definite rules and standards for type approval of CPE’s shall be done in the manner as prescribed in the Guidelines of October 23, 1980 covering PBX’s and December 29, 1982 covering cordless telephones.



e. An Interim Type Approval Board composed of technical representative from the PETEF, ITESAP, NTC and a duly organized user's group or association shall be formed to collate the respective interface parameters of the various telecommunication network operators and formulate the standards to be used for the type approval of CPEs. For this purpose, all telecommunications network operators shall submit to the Interim Type Approval Board their respective interface parameters within two (2) months after the Board formulation.

f. All test results will be recorded and if all results shall be within acceptable values of the standards set jointly by the Committee, the same shall be the basis of the grant of a Certificate of Type Approval.

g. A previously type approved CPE brought into the country by a subscriber shall need no further type approval and shall be deemed type approved and may be authorized for connection into the public telecommunication network provided adequate proof that all required tax dues shall have been paid by the subscriber at the point of entry.

h. The format of the type approval certificate shall be as shown in Annex B.

Section 3. Accreditation of CPE Suppliers

a. Any person, entity, corporation, association or agency who intends to manufacture, maintain in stock and/or sell any CPE as listed in Table A of this Circular must be duly accredited by this Commission.

b. The minimum requirements for the grant of an Accreditation Certificate are as follows:

- paid up capitalization of 250,000 pesos;
- one duly licensed Electronics and Communications Engineer employed by the supplier on a full time basis with a work experience of one (1) year or attendance in a formal technical training in the installation, operation, and maintenance of CPEs;
- two (2) qualified electronics and/or radio communication technicians employed by the supplier on a full time basis;
- Stock of spare parts sufficient for at least two (2) years or in accordance with the CPE manufacture's recommendations;
- Valid distributorship or representation agreement on CPE's to be sold; and
- Proof that the CPE to be sold are duly type approved.

c. Any applicant for supplier accreditation shall submit to the Commission the following:

- duly certified SEC papers;
- proof of paid up capitalization;

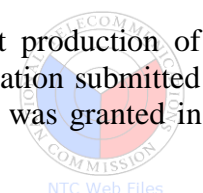


- proof of currently valid distributorship or representation agreement on products to be sold;
 - proof that the CPE to be sold are duly type approved; and
 - List of Engineers and technicians employed by the suppliers on a full time basis.
 - List of spare parts described in b. above
- d. The Commission shall issue an Accreditation Certificate to a qualified CPE supplier valid for a four (4) year period renewable, upon presentation of proof of continued compliance with the above mentioned requirements.
- e. The Commission may suspend or revoke any Accreditation Certificate issued to CPE supplier for any of the following grounds:
- Selling and connection or attachment to public network facilities of non-type approved CPEs;
 - Connection or attachment of any CPE to a public telecommunications network without prior notification and approval of the telecommunications network operator;
 - Failure to comply with any of the requirements in section 2.b above.
- f. The Commission may conduct audit visits to CPE supplier facilities for the purpose of determining compliance to these rules as well as to determine technical capability and competence of the same to conduct maintenance and repair of CPEs.
- f. A supplier with currently valid accreditation agreement with a public telecommunications network operator at the time of the approval and implementation of this Circular shall be recognized by the Commission as a duly accredited CPE supplier provided that the CPE sold have been duly type approved and only with respect to the accrediting network operator.

Section 4. Responsibilities of the CPE Supplier

The accredited CPE supplier shall:

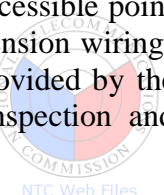
- a. be responsible for securing type approval for CPE it intends to market;
- b. Maintain adequate and satisfactory maintenance and repair capabilities for CPE for which it has received proper certification;
- c. In the case of a manufacturer/supplier ensure that the subsequent production of previously type approved CPE will continue to comply with the specification submitted for type approval, on the basis for which a Type Approval certification was granted in accordance with this Circular



- d. Submit to the Commission a list of all type approved CPE's and other information as may be required by the Commission from time to time; and
- e. Comply with all the conditions for the grant of the accreditation as provided for in this Circular
- f. Provide a properly authenticated seal, label or sticker to be affixed to each CPE type approved for connection to the public network.

Section 5. Connection of CPE to a Public telecommunication Network

- a. Only type approved CPE shall be connected to a public telecommunications network. The network operator is authorized to disconnect from the network any CPE not duly type approved.
- b. A subscriber desiring to connect a type approved CPE with a public telecommunications network shall apply for the same with the network operator in writing specifying the following:
 - Name of the subscriber or company
 - Location/Address where the CPE is to be installed and operated;
 - Quantity, type, make, model, serial number and supplier of the CPE;
 - Number of exchange lines, service lines, trunk lines or leased lines required;
 - Required in-service date; and
 - Pertinent technical information as may be deemed necessary by the network operator. This shall pertain only to CPE's other than telephone instruments.
- c. The network operator, upon receipt of an application shall exert all efforts to meet the required in-service date. Should the network operator be unable to provide the required facilities, the subscriber may opt to provide at his own expense the required facilities between the central office/ exchange of the operator and the point of interconnection at the subscriber premises. In such a case, the network operator shall allow to the central office/exchange subject to an access agreement with the subscriber as may be necessary. Such facilities provided for by the subscriber at his own expense shall not be used by the network operator for any other use or another subscriber other than the one providing for the same.
- d. Transfer of an installed CPE to a location within the same address shall require prior notification to the network operator. Transfer to another address shall require a written application to the network operator and prior approval.
- e. The network operator shall terminate its facility in a protector at an accessible point usually located at the ground floor of a building. All in-house wiring, extension wirings or cable runs from this point (or the point of interconnection) shall be provided by the subscriber and/ or the building owner but shall be subjected to the inspection and approval of the network operator.



- f. The protector at the point of interconnection shall normally be provided by the network operator unless a similar or equivalent protector as recommended by the CPE manufacturer is supplied by the subscriber as an accessory to the CPE at no cost to the network operator.
- g. Any CPE connected to the public telecommunications network shall ensure adequate safety to the network, the network operator's employees and to the public.
- h. All connections to the public telecommunications network shall be made by means of an appropriate connector/interface arrangement at an interface point agreed upon by the subscriber and the network operator. All CPE connector/interface arrangements shall be in conformance with type designations and standards as recommended by internationally recognized organizations such as the ISO, EIA, CCITT or other similar agencies.
- i. Connector interface arrangements shall be installed in a manner so that disconnection or connection of the CPE does not cause harm to the public network nor interference to the normal operation of other equipment at the customer premises which remains connected to the public network.
- j. The signal delivered by the CPE shall not exceed the maximum allowable signal power or level permitted at the point of interconnection.
- k. If clear documented proof that a CPE can cause or has caused harm or fraud to the public network, the network operator shall immediately notify the subscriber and the Commission that a temporary discontinuance of service or disconnection of the CPE might be necessary. This written notification together with the documented proof shall be sent to the subscriber and the Commission fifteen days prior to the discontinuance of service or disconnection of the CPE to provide the subscriber the opportunity to correct the situation.
- l. In cases where prior notice is impractical, where public interest is prejudiced and if immediate action is prudent under the circumstances the network operator may discontinue service, with written notice of disconnection to follow, or disconnect the CPE upon presentation of the written notice to disconnect.
- m. The operation of a CPE shall be limited to within a single building or portions thereof or between contiguous buildings or portions thereof which are owned and leased by the subscriber and are in the same exchange area.
- n. The subscriber shall operate the CPE for his exclusive use and not for commercial purposes, however sharing of PBX's shall be permitted under the following conditions:
- there must be separate central office trunks serving, and billed to each subscriber; and



- the partitioning and segregation of network services provided to subscribers must be done in a manner which prevents them from gaining access to each other's network services.

Section 6. Responsibilities of the Network Operator

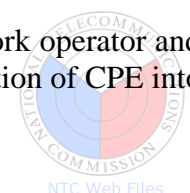
The network operator shall:

- a. allow without discrimination, connection of any type approved CPE into its network provided that all conditions for the connection of the CPE to the network are fully met;
- b. exert all efforts to provide the applied for facilities for CPE connection on or before the subscribers desired in-service date;
- c. in cases when the required in-service date can not be met due to the unavailability of the required facilities, [allow access into his central office and/or exchange, should] the subscriber may opt to provide at his own expense for the required facilities, subject to an access agreement as may be necessary under the circumstances;
- d. not use facilities provided for by subscriber at their own expense for another uses and in serving other subscribers.
- e. Provide the subscribers and the Commission a minimum advance written notice of one (1) year before major changes are made on the network interface that will affect the compatibility of the CPE connected with the facilities of the network operator;
- f. Provide the Commission with all the necessary information regarding its network required to undertake type approval of a CPE and shall assist the Commission during type approval of a CPE when so required;
- g. Not charge unreasonable and discriminatory rates against subscriber who desire to supply CPE;
- h. Exert all efforts to improve the quality of his network at all times;
- i. Limit the number of direct lines serving one office to a reasonable quantity and encourage the use of Key systems or PBX's to minimize if not totally avoid private intra-office traffic from contributing to the traffic load of the serving Central Office and;
- j. Have the right to temporarily discontinue service or disconnect a CPE causing harm or fraud to the public telecommunications network or one whose connection to the network was accomplished under fraudulent circumstances.

Section 7. Responsibility of the Customer/Subscriber

The customer or subscriber desiring to supply a CPE for connection to the network shall:

- a. do so only after proper application for connection to the network operator and after approval of the same subject to the conditions for connection of CPE into a public network as specified in this Circular;



- b. provide adequate safeguards and be responsible for the proper maintenance and operation of the CPE and shall not tamper with the CPE and/or its network interface circuitry in order that the same shall not cause harm to the public network, the network operator employees and the public;
- c. secure type approval or prior approval of the network operator of any change, modification, adjustment to the CPE and/or its network interface circuitry; and
- d. cooperate with the public network operator in maintaining network integrity;

Section 8. Tariff Revisions

All tariff revisions necessary to implement this circular shall be filed by the network operators concerned within six (6) months upon approval of this Circular to the Commission for approval.

Section 9. Violations

Any violations or infraction of the telecommunications laws and this Circular by any person, corporation, entity, subscriber shall be cause for administrative sanctions by this Commission.

Section 10 Repealing Clause

Any Circular or memorandum, rules and regulations and practices which are in conflict with this Circular shall be deemed, superseded, amended or repealed.

Section 11. Effectivity

This Circular shall takes effect immediately and may be revised, amended or repealed.

Quezon City, Philippines.

JOSE LUIS A. ALCUAZ
COMMISSIONER

Approved:

RAINERIO O. REYES
Secretary
Department of Transportation and Communications



TABLE A

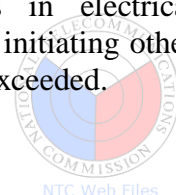
LIST OF AUTHORIZED CUSTOMER-PROVIDED EQUIPMENT (CPE)

Table 1. CPE which, subject to existing type approval procedures, may be connected to the telephone networks, even before approval of these Rules.

1. Private Branch Exchanges (PBXs)
2. Key Telephone Systems (KTS)
3. Multi-function systems such as Hybrid KTS/PBX systems.
4. Wireless Telephone Sets.

Table 2. CPE that may be connected to a public network upon the effectivity of the applicable rates and tariffs.

1. Alarm dialing equipment for industrial, security, fire, instruction and equipment failure applications.
2. Telephone set if intended as replacement of network operator-provided telephones on single-line service.
3. Automatic Dialer or a separate device that dials a call automatically over the public network. The device may include the capability to repeat the dial attempts after encountering busy signal.
4. Automatic Answering Machine or device connected to a telephone line which operates in such a manner that when the user is absent, the device answer calls and gives a recorded message and may not provide for recording a short message from the caller.
5. Call Distribution or a device which distributes incoming calls to different operating position to spread traffic load and increase efficiency.
6. Traffic Recorder or device for measuring the amount of traffic carried by a group or several groups of switches, lines or trunks and may have the capability of periodically printing a record of that traffic.
7. Variation Monitors or a device for sensing deviations in electrical characteristics of a line and capable of providing an alarm or initiating other actions when programmed of the electrical characteristics are exceeded.



8. Data Modem or a device that converts the signals of a business machine to signals that are suitable for transmission over telecommunication circuit and vice versa. Also known as data set.
9. Data Terminal Equipment (DTE) are equipment consisting of digital end instruments that convert user information into data signal for transmission, or reconvert the received data signal into user information. The DTE may consist of a single piece of equipment which provides all the required functions necessary or it may be an interconnected subsystem of multiple pieces of equipment which together perform all the required functions.
10. Facsimile equipment or device employed at the transmit end to convert a hard copy to electrical signals suitable for delivery to the public network and at the received end to convert picture signals to a hard copy.
11. Teleprinter or device having a signal actuated mechanism for automatically printing received message. The device may also include a keyboard for manually sending line signals, a paper tape transmitter and paper tape punch/reader or the electronic equivalent of these. (For connection to a telex network)
12. Multiplexer or device that allows transmission of a number of different signals simultaneously over a single telecommunication channel. Concentrators are included in this heading.
13. Special purpose terminal equipment designed to operate in conjunction with central office facilities to received and transmit data from a subscribers location or to operate in a manner that serves public interest. (Example, transducers for metering of water, gas and electricity usage in homes and offices).
14. Wireless Paging Equipment or system using selective radio signals to summon a person, exact whereabouts unknown, to the nearest telephone or to deliver a message to the person carrying the paging unit. Such equipment falls under these Rules if it has met the relevant frequency licensing requirements.



Table B

TYPE APPROVAL CERTIFICATE FOR TERMINAL EQUIPMENT FOR INTERCONNECTION

T.A.C. No.

MANUFACTURER :

TYPE OF EQUIPMENT :

BRAND and MODEL :

This is to certify that the Terminal Equipment above is technically compatible for connection to the facilities of

.....
(Name of Public Telecommunications Network)

() Exchange Line Facility

() Private Line Facility

() Other
(Specify)

Issued to :
(Grantee)

Date of Effectivity :

Special Conditions : _____

.....
.....
.....
.....

(Name / Signature of Responsible Officer)



NTC Web Files