



Republic of the Philippines
NATIONAL TELECOMMUNICATIONS COMMISSION
NTC Bldg., BIR Road, East Triangle, Diliman, Quezon City

MEMORANDUM CIRCULAR: 07-08-2015

SUBJECT: RULES ON THE MEASUREMENT OF FIXED BROADBAND/INTERNET ACCESS SERVICE

WHEREAS, the 1987 Constitution fully recognizes the vital role of communications in nation building and provides for the emergence of communications structures suitable to the needs and aspirations of the Nation;

WHEREAS, the promotion of competition in the telecommunications market is a key objective of Republic Act No. 7925 (R.A. No. 7925, for brevity), otherwise known as "The Public Telecommunications Policy Act of the Philippines", which mandates that *"a healthy competitive environment shall be fostered, one which telecommunications carriers are free to make business decisions and interact with one another in providing telecommunications services, with the end in view of encouraging their financial viability while maintaining affordable rates"*;

WHEREAS, R.A. No. 7925 further defines the role of the government to "promote a fair, efficient and responsive market to stimulate growth and development of the telecommunications facilities and services";

WHEREAS, R.A. No. 7925 mandates the National Telecommunications Commission (the Commission, for brevity) to promote and protect the consumers of public telecommunications services;

WHEREAS, customers/subscribers/users have the right to be informed of the quality of the broadband/internet connection service being provided;

NOW, THEREFORE, pursuant to R.A. No. 7925, Executive Order (EO) No. 546 series of 1979, and to maintain and foster fair competition in the telecommunications industry, and promote and protect the rights of broadband service customers/subscribers/users, the Commission hereby promulgates the following definitions and rules:

A. DEFINITIONS

1. "Broadband", as defined by the International Telecommunications Union (ITU), refers to a data connection speed of at least 256 kbps.
2. "Commission" refers to the National Telecommunications Commission.
3. "Fixed Wireless Broadband" refers to a data connection using fixed wireless technologies.
4. "Cable Broadband" refers to a data connection using coaxial cables.
5. "Digital Subscriber Line" (DSL) refers to a data connection using DSL technologies.
6. "Fiber-To-The-Home" (FTTH) refers to a data connection using fiber optic cables.
7. "Packet" refers to the unit of data that is routed between an origin or source and a destination on the internet or any other packet-switched network.
8. "Jitter" refers to the variation of end-to-end delay from one packet to the next within the same packet stream/connection/flow.

9. "Latency" refers to the time it takes for a packet of data to get from a source to a destination.
10. "Packet Loss" refers to the number of packets that does not reach the destination.
11. "End-to-End Delay" refers to the time it takes for a packet to be transmitted across a network from source to destination.

B. RULES ON OFFER INFORMATION

1. The subscribers/consumers/users shall be properly informed of the broadband/internet connection service being offered to them through, among others, flyers, brochures, advertisements, etc. The information shall always be updated.
2. Internet Service Providers (ISPs) shall specify the average downstream and upstream data rates per area. The area can be administrative regions (e.g. NCR, Region I, and so on) or provinces, or cities/municipalities.
3. Service offers made through advertisements, flyers and brochures shall contain the service rates for broadband/internet connection data plans.
4. Service agreements and service level agreements shall contain the service rates for broadband/internet connection data plans.
5. ISPs may set maximum limits on the data volume for each service package/plan/promo per day/week/month, provided that the subscribers/consumers/users is informed automatically when the data volume consumed has reached 80%, 85%, 90% and 95%. When the data volume consumed has reached 100%, the subscriber/user shall be automatically informed that if he/she opts to continue the service, he/she will be charged the normal rates for such service.
6. ISPs with less than 5,000 subscribers/consumers/users may opt to establish a 24/7 Help Desk hotline number, instead of an automatic system. This will allow subscribers/consumers/users to call his/her service provider to find out how much volume of data remains available to him/her. The service provider shall inform the subscribers/consumers/users that if the data volume consumed has reached 100% and if the subscribers/consumers/users opts to continue with the service, he/she shall be charged the normal rates.

C. MEASUREMENTS AND METRICS

1. The Commission shall conduct the monitoring and measurements.
2. The following parameters shall be monitored and measured:
 - a. Downstream and upstream average data rate;
 - b. Latency;
 - c. Jitter; and
 - d. Packet loss.
3. The measurement shall be conducted taking into consideration the ISPs uncontrollable variables, e.g. for ISPs providing only the access network and lease bandwidth from broadband connectivity providers, the measurement shall be conducted within the access network of the said ISPs.
4. For DSL, the measurement shall be done at the station protector that connects to the drop wire.
5. For FTTH, the measurement shall be done at the "IN" port of the Optical Network Unit (ONU).

6. For Fixed Wireless, the measurement shall be done at the "IN" port of the fixed wireless modem.
7. For Cable Broadband, the measurement shall be done at the LAN port of the cable modem.
8. The measurements shall be taken using standard devices, available commercially without changes.
9. There shall be no applications that are running while the measurements are being conducted.
10. The test equipment shall be free from viruses or any form of malware.
11. The places where the measurements shall be conducted, Point "A", shall be a combination of known and unknown locations. The "known" locations shall be agreed upon by the ISPs, the consumer groups and the Commission. The "unknown" locations shall be selected by the Commission. The "unknown" locations shall be made known to the ISPs and the consumer groups not later than 2 days after the conduct of the measurements.
12. The server that shall be accessed during the tests, Point "B", shall be:
 - a. Within the Local Area Network (LAN) of the ISP;
 - b. Outside the LAN of the ISP but within the national network; and
 - c. Outside the LAN of the ISP and located outside the Philippines.
13. To ensure high reliability of the results, the Commission shall perform the monitoring and measurements during peak and off peak hours, using different subscribers/consumers/users broadband/internet access data plans, among others. The monitoring and measurements shall be performed at least twice (2x) a week. There shall be no monitoring and measurement activities during adverse weather conditions.
14. The Commission shall prescribe the official measurement and monitoring tool to be used. The official measurement and monitoring tool shall be downloadable and available to the public.

D. PUBLICATION OF RESULTS OF MONITORING AND MEASUREMENTS

1. The results of the monitoring and measurements shall be posted in the Commission's website not later than five (5) days from the end of each month and shall be released to the media. Results of the test shall be made available to the public upon request.
2. The results shall be averaged for each of the ISPs.
3. The results shall indicate at least the following:
 - a. Points "A" and "B" where the monitoring and measurements were performed;
 - b. Date and time of the monitoring and measurements; and
 - c. Subscriber/consumers/users data plans.
4. Before the posting of the results, each of the ISPs shall be informed of the same and shall be given the opportunity to explain their side.

E. OTHER RULES

1. Service providers offering Committed Information Rate (CIR) shall comply with Memorandum Circular (MC) No. 12-19-2004.
2. Only duly enfranchised and authorized Public Telecommunications Entities may provide networks for broadband/internet services.
3. Memorandum Order No. 07-07-2011 shall remain effective.
4. Any circular, order, memoranda or parts thereof inconsistent herewith are deemed repealed or amended accordingly.

5. This Circular shall take effect fifteen (15) days after publication in a newspaper of general circulation and upon filing with the UP Law Center of three (3) certified copies of this MC.

Quezon City, Philippines 13 August 2015.


GAMALIEL A. CORDOBA
Commissioner


CARLO JOSE A. MARTINEZ
Deputy Commissioner


DELILAH F. DELES
Deputy Commissioner