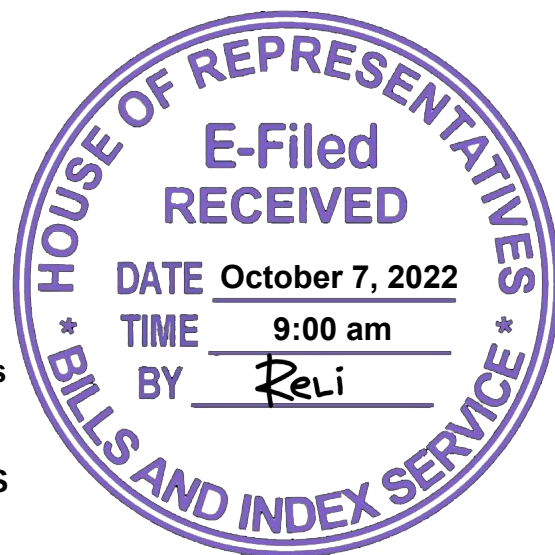




Republic of the Philippines
House of Representatives
Quezon City, Metro Manila

NINETEENTH CONGRESS
First Regular Session

HOUSE BILL No. 5449



Introduced by **HONORABLE ERNESTO “ERNIX” M. DIONISIO, JR.**

AN ACT
REQUIRING ALL PUBLIC TELECOMMUNICATIONS ENTITIES AND INTERNET
SERVICE PROVIDERS TO INCREASE SERVICE COVERAGE AND DELIVER A
MINIMUM STANDARD FOR INTERNET CONNECTION SPEED

EXPLANATORY NOTE

The demand for reliable and accessible Internet services in the Philippines has never been more pronounced than in the wake of the COVID-19 pandemic. With the rapid shift to remote learning and telecommuting, we witnessed stories of teachers and students climbing roofs to get service¹ or people struggling to attend an online meeting—proof of the difficulties of poor Internet coverage and quality of service.²

With the economy irreversibly transformed by digitalization, Filipinos continue to clamor for better Internet services. A survey conducted by global IT firm Cisco showed 91% of workers believe the Philippines need dramatic improvements in Internet quality.³ A study by the United Nations and the World Bank also found evidence that primary students experienced slow or little progress in such basic skills as reading and comprehension, due in part to many households lacking Internet access and relying instead on paper-based modules.⁴

While download speeds have gradually improved over the years, Ookla's Speedtest Global Index as of April 2022 shows that Internet speed in the country is still among the slowest in ASEAN-6.⁵ Open signal, which also measures broadband performance, found that in January 2022 many Filipinos still experience poor data

¹ Lopez, E. (2021, January 7). *Scaling roofs and mountains, Filipino students battle to take online classes*. Reuters via Interaksyon. <https://interaksyon.philstar.com/trends-spotlights/2021/01/07/183184/scaling-roofs-and-mountains-filipino-students-battle-to-take-online-classes/>

² Ochave, R. M. (2020, July 1). *Filipinos struggle to work from home in Internet-challenged country*. BusinessWorld. <https://www.bworldonline.com/editors-picks/2020/07/01/302604/filipinos-struggle-to-work-from-home-in-Internet-challenged-country/>

³ Gonzales, G. (2022, April 21). *91% of PH workers believe Internet infrastructure needs to improve faster – survey*. Rappler. <https://www.rappler.com/technology/workers-philippines-believe-Internet-infrastructure-needs-improve-faster-cisco-study/>

⁴ Bacilig, C. E. (2022, April 8). *When 10-year-olds can't read: The dulling of PH education*. Philippine Daily Inquirer. <https://newsinfo.inquirer.net/1580203/when-10-year-olds-cant-read-the-dulling-of-ph-education>

⁵ Ookla Speedtest Global Index. (2022, April). <https://www.speedtest.net/global-index>

services, even with 4G and 5G,⁶ and experience slower speeds than advertised.⁷ Poor performance on other important measures of Internet service quality, such as upload speeds, latency, jitter, and packet loss, which affect the transmission of data also contribute to poor adoption of digital applications such as digital banking, telehealth, and eCommerce.⁸

Global best practices emphasize the importance of creating rules to ensure that the service consumers receive is within an acceptable range of the advertised speeds, service reliability, and other measures of Internet quality.

To institutionalize a mechanism for a comprehensive and regular measure of Internet quality of service in the Philippines, this bill aims to:

- Regularly monitor and analyze nationwide data on Internet connectivity and formulate broadband development plans with the necessary policy to improve Internet services;
- Set minimum standards for broadband quality of service, such as reliability (percentage of advertised speed consistently provided by an ISP to subscribers over a given period of time) and minimum download speed (the lowest level of download speed that service providers are allowed to deliver to a subscriber);
- Enforce compliance to performance standards and penalize service providers who consistently fail to deliver the acceptable level of broadband quality of service; and
- Promote the rights and welfare of broadband end users.

In view of the foregoing, the immediate passage of this bill is earnestly sought.



ERNESTO "ERNIX" M. DIONISIO, JR.
Assistant Majority Floor Leader
Congressman
First Congressional District of Manila

⁶ Fenwick, S. (2022, April 5). *Understanding mobile experience explains why users in the Philippines switch mobile operators*. Opensignal. <https://www.opensignal.com/2022/04/05/understanding-mobile-experience-explains-why-users-in-the-philippines-switch-mobile-operators>

⁷ Camus, M. (2021, September 9) Dito defends Internet speed results after other tests show slowdown. <https://business.inquirer.net/330380/dito-defends-Internet-speed-results-after-other-tests-show-slowdown>

⁸ Better Internet PH. (2021, September 15). Why Download Speed is Not Everything. <https://medium.com/@betterInternetph/why-download-speed-is-not-everything-e2e4f8f36665>



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Be it enacted by the Senate and the House of Representatives of the Philippines in Congress assembled.

Section 1. Short Title. – This Act shall be known as the "Better Internet Act".

Section 2. Declaration of Policy. – The State recognizes the importance of technological advancements in nation-building, economic, and promoting people's well-being and as such, it endeavors to ensure the provision of strategic, reliable, cost-efficient, and citizen-centric information and communication technology (ICT) infrastructure, systems, and resources to guarantee that the population has access to quality, and affordable ICT services.

In line with this, the State shall ensure that all Public Telecommunications Entities (PTEs) and Internet Service Providers (ISPs) will continuously upgrade their facilities and improve their services to be responsive to the growing demand for quality Internet access services.

Section 3. Definition of Terms. – As used in this Act, the following terms are defined as follows:

- a) *Bandwidth* shall refer to the data transfer rate or the amount of data that can be carried from one point to another in a given time period expressed in bits per second or multiples of it;
- b) *Broadband* shall refer to high-speed Internet service that is always on and faster than traditional dial-up access transmitted through various wired or wireless data transmission technologies such as, but not limited to, digital subscriber line (DSL), cable modem, fiber optic cable, fixed wireless, satellite, cellular mobile,

and TV white space, and other evolving and emerging technologies as may be developed in the future;

- c) *Cellular towers* shall refer to passive telecommunication tower infrastructure, including, but not limited to, (i) three-legged or four-legged structures, (ii) poles, or (iii) mast, or (iv) similar infrastructure used to support mobile cellular network facilities;
- d) *Compliance period* shall refer to the first two (2) years from the effectivity of this Act within which all ISPs and PTEs are required to comply with the minimum broadband download speeds set forth in this act;
- e) *Greenfield service area* refers to a barangay where an internet service provider is completely absent or that has an internet connection but does not reach an average minimum broadband speed of two (2) megabits per second (mbps), or as prescribed by the dict, whichever is higher;
- f) *Internet Service Providers or ISP* shall refer to an entity, with or without A Congressional franchise, registered as A value-added service (VAS) provider from the National Telecommunications Commission (NTC) to build, install, operate, and maintain an internet network in order to offer Internet access services to the public for compensation;
- g) *Jitter* shall refer to the variation of an end-to-end delay from one packet to the next within the same packet stream, connection, or flow;
- h) *Latency* shall refer to the time it takes for a packet of data to get from a source to a destination;
- i) *Packet* shall refer 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;
- j) *Packet Loss* shall refer to the number of packets that does not reach the destination;
- k) *Service Reliability* or "*Uptime*" refers to the delivery of a certain percentage of advertised speed to a subscriber over a given time.
- l) *Public Telecommunications Entity or PTEs* shall refer to any person, firm, partnership or corporation, government or private, engaged in the provision of telecommunications services to the public for compensation;
- m) *National ICT Household Plan* refers to the plan for the improvement of ICT access and use, including broadband access, by households and individuals developed by the Department of Information Communications Technology (DICT) on the basis of information gathered from the National ICT Household Survey;

- n) *Threshold Speed* refers to the minimum upload and download speeds that an ISP OR PTE must provide to their end user as an entry-level broadband service;
- o) *Unserved Area* refers to a specific population or land area of a city/municipality where broadband access service is not available, as identified by the National ICT Household Plan; and
- p) *Underserved Area* refers to a specific population or land area of a city/municipality where broadband access service is covered and available, but below the threshold speed. The underserved areas shall be identified by the National ICT Household Plan while the threshold speed shall be determined by this Act and, subsequently, by the NTC.

Section 4. Increase in service coverage. – The NTC shall require all ISPs and PTEs to extend and expand the service coverage of wired and wireless broadband service in all unserved and underserved areas in the Philippines within two (2) years from the effectivity of this Act (the "Compliance Period"), according to the schedule and strategy to be set forth by the DICT in the National ICT Household Plan.

The DICT shall develop the National ICT Household Plan, identify therein unserved and underserved areas [in the Philippines] and devise a plan of action to ensure Internet services shall be made available at the household level. The DICT shall make such Information and plans public within sixty (60) days from the effectivity of this Act; Provided, that subject to regulatory requirements, ISPs shall be allowed to own, establish, and operate wired and wireless networks, utilizing any available technology, in order to meet their obligations under this Act. ISPs shall be allowed access to unlicensed radio spectrum necessary to enable them to utilize wireless technologies to provide Internet service: Provided further, that ISPs shall not build international carrier. Inter-exchange carrier, local exchange carrier, and mobile radio telephone networks reserved for PTEs, as provided for In Republic Act No. 7925, otherwise known as the Public Telecommunications Policy Act of the Philippines.

Section 5. Delivery of advertised speed - Within one (1) year from the effectivity of this act, the national telecommunications commission (NTC) is hereby mandated to require all PTES and ISPS to only advertise and offer internet service download speeds that they can consistently provide and work towards providing an average internet connection speed above global average. PTES and ISPS shall deliver eighty (80) percent of the advertised broadband speed to their subscribers at eighty (80) percent service reliability or eighty (80) percent of the time: provided, that the entry-level broadband connection speed offered by ISPS or PTES to subscribers shall not be lower than the following:

- a) Twenty (20) megabits per second (Mbps) for wired broadband and ten (10) Mbps for wireless broadband in metropolitan cities;
- b) Ten (10) Mbps for wired broadband and five (5) Mbps for wireless broadband in all other cities; and
- c) Five (5) Mbps for wired broadband and two (2) Mbps wireless in rural areas.

PTEs and ISPs shall have two (2) years from the effectivity of this Act to ensure that they provide, as a minimum, the threshold speeds to their end-users; Provided,

That PTES and ISPS that will expand coverage and offer internet services in “greenfield service areas” or previously unserved and underserved areas, as identified by the DICT, shall not be subjected to the minimum download speed for the next five (5) years.

The NTC shall conduct a regular review of technological advancements in the field of communications and data transmission to determine the necessity of adjusting the minimum speed standards hereby set in this act; Provided, That internet speed and service reliability of internet connections delivered by service providers shall be measured based on the methodology prescribed by the NTC.

After the end of the compliance period, it shall be considered a violation of this Act, subject to the penalties provided in Sec. 15 of this Act, to offer paid Internet service below the threshold speed. For the avoidance of doubt, there shall be no minimum speed required for free Internet service; Provided, however, that service provided under the Free Internet Access in Public Places Act or RA 10929 shall meet the minimum speeds prescribed therein or in the relevant rules of the DICT for free Internet service programs.

Section 6. Measurement and Publication of Broadband Quality of Service (QOS). – In order to monitor and enforce compliance of PTEs and ISPs, the NTC shall:

- a) In coordination with DICT, prescribe a criteria and methodology for the measurement and publication of broadband quality of service, including parameters such as download speed, upload speed, latency, packet loss, jitter, and service availability, with appropriate benchmarks, after public consultation and hearings within six (6) months from the effectivity of this act;
- b) Provide the public a mechanism to run broadband diagnostics in a secure and consumer-friendly format;
- c) Develop a procedure for collecting and analyzing broadband QOS measurements from various platforms and processing test data in a central database, which shall update and release results every twenty-four (24) hours, at the least;
- d) Make publicly available on the NTC website and other media the criteria and methodology for the broadband QOS measurement tool and the list of platforms using the NTC-prescribed broadband measurement mechanism;
- e) After the two-year compliance period, review compliance of PTES and ISPS with the minimum download speeds and prescribe and upgrade on an annual basis, the minimum broadband download speed and quality of service (QOS) standards, on internet industry to ensure that performance standards shall, at a minimum, be at par with service levels established in regional data network performance indices and aligned with international best practices. Such QOS standards shall take into account speed, packet loss, jitter, latency, and service availability; *Provided*, that the NTC shall not decrease the minimum speeds set forth in this act. *Provided*, further, that new performance standards shall be published at least thirty (30) days before they take effect.

- f) Diligently monitor and conduct monthly network audits and/or QOS tests in order to ensure compliance of the PTEs and ISPs with threshold speeds, advertised speeds, and coverage obligations, and publish its network audit report on a monthly basis; and,
- g) Publish the results of all the NTC's network audits, broadband QOS tests, and the results of the consumer broadband QOS tests on their official website and social media accounts on a monthly basis, and furnish a copy of the same to the DICT. Such reports should be in a format that can easily be analyzed by third-party data scientists.

Section 7. Responsibilities of the DICT. – In addition to responsibilities imposed in other sections of this Act, the DICT shall:

- a) Maintain and make public a National ICT Assets Index (NICTAI), which shall be updated on an annual basis, in order to provide accurate data on broadband coverage and ICT adoption and utilization in the country;
- b) Conduct the National ICT Household Survey and publish the National ICT Household Plan every three (3) years, and identify unserved and underserved areas for purposes of this Act;
- c) Regularly review and update ICT policy guidelines, strategies and plans, including, but not limited to, the National Broadband Plan to ensure that the Philippines' Internet service policy framework is at par with global standards and best practices; and
- d) Ensure the delivery of Internet services at the household level through a schedule and plan of action that includes, but is not limited to, infrastructure sharing and co-location arrangements;

Section 8. Responsibilities of the NTC. – In addition to responsibilities imposed in other sections of this Act, the NTC shall:

- a) Ensure that PTEs and ISPs meet the minimum standards regarding connection, reception, just pricing, and billing practices to promote and protect the rights of consumers of Internet services;
- b) Determine whether the ICT industry has built out the optimal number of towers and other infrastructure necessary to meet the objectives of this law;
- c) Promulgate an efficient and expeditious administrative process for the registration of Internet service providers and shall, in coordination with the DICT, develop a set of criteria for qualifying service providers that will encourage the widest possible participation of as many industry players as possible who will build the necessary internet network Infrastructure and offer Internet services to end users in different parts of the country and will take national security into consideration, particularly for facilities that interface directly with another country's domestic network;

- d) Publish a spectrum management policy framework that promotes a transparent, efficient, and equitable approach to distributing spectrum, including clear guidelines for: (i) recalling unutilized spectrum, (ii) reassigning spectrum for more efficient use, and (iii) implementing an open frequency approach to expand Internet access in underserved and unserved areas, to be developed together with the DICT and the Philippine Competition Commission;
- e) Provide the public with annual reports on the performance of PTEs and ISPs in terms of increasing Internet coverage and meeting the threshold download speeds;
- f) Provide policies and standards of network elements to ensure that PTEs and ISPs will maintain the Quality of Service (QOS) of the Internet connection they provide to their respective area of coverage;
- g) Provide for an expeditious mechanism to address consumer complaints on slow Internet speed and false advertising of Internet speeds; and,
- h) Establish an efficient monitoring system or framework with regard to the PTEs and ISPs' management of consumer complaints and maintain records of subscribers' complaints.

Section 9. Reports to Congress. – The DICT and NTC shall submit a quarterly progress report to Congress of all acts performed pursuant to this Act during the first week [of] AFTER the immediately preceding quarter for the next two (2) years from the effectivity of this act.

Section 10. Streamlining Permitting Requirements. – The DICT and other relevant government agencies including, but not limited to, the Department of Interior and Local Government (DILG), Department of Public Works and Highways (DPWH), Department of Human Settlements and Urban Development (DHSUD), Anti-Red tape Authority (ARTA), Civil Aviation Authority of the Philippines (CAAP), Department of Health (DOH), and the Food and Drug Administration (FDA) shall ensure the streamlining of the permitting process for the construction, installation, and operation of telecommunications tower and other infrastructure such as, but not limited to, permits for base stations, cables, poles, and other work elements necessary to offer Internet service.

The DICT shall set up a one-stop shop that shall coordinate with other regulatory agencies regarding the permitting requirements and applicable regulatory fees for installing common towers, cables, poles, and other network elements in order to facilitate the attainment of the objectives of this Act.

To facilitate the expeditious planning of the country's ict infrastructure, all ptes and isps are required to submit, within fifteen (15) working days upon the request of the DICT or the NTC, a copy of their most updated and complete broadband network map, enabling the government to draw up incentive plans and opportunities in order to boost internet service and compel the creation of the infrastructure essential for overall economic growth.

Section 11. Rights of End-users. - The user of internet services shall have the following basic rights:

- a) To be entitled to internet service which is non-discriminatory, reliable, and conforms with minimum standards set by the NTC;
- b) To be rendered internet services within two (2) months from application for service, in areas where the service is advertised to be available;
- c) Timely correction of errors in billing or in prepaid load and the immediate provision of rebates or refunds by the service provider without the need for demand by the user; and
- d) Subject to the filing of a formal request to the service provider, a user may request the immediate termination of service without the imposition of fees or penalties, and with the refund of any fee or charge already paid by the user, should a service provider not consistently comply with preceding paragraphs (A), (C), (D), or any minimum performance standards set by the NTC.

Section 12. Local Government Units (LGUs) as Partners in Broadband Infrastructure Development. – The LGU shall serve as a strategic partner who shall ensure that all LGU-related permits and requirements necessary to expand Internet coverage and improve the quality of Internet service shall be acted upon Immediately. In order to ensure that all municipalities and barangays have access to Internet facilities, an LGU shall be allowed to build and operate its own broadband network in partnership with PTEs and ISPs.

Section 13. Infrastructure Sharing and Co-location. –

- a) The DICT shall promulgate policies, rules, and regulations, in coordination and/or jointly with the concerned national government agencies, government-owned and operated corporations, and local government units, to ensure that infrastructure, whether existing or built in the future, necessary or capable of supporting data transmission networks or services are:
 - i. mandatory for open access and made available for co-location and co-use by the owner of network facilities, equipment, and infrastructure on an open, fair, and non-discriminatory basis to any access seeker's network facilities;
 - ii. as far as possible, deployed together with roadworks, pipe-laying, and other Infrastructure development by both government and private entities; and
 - iii. propagated in the most cost-efficient and timely manner through various means. Including encouraging the operation of independent entities that build and operate towers, dark fiber, and utility corridors, among other infrastructures that help facilitate broadband network deployment.
- b) The DICT shall, in coordination with the Philippine Competition Commission and other relevant government agencies, promulgate policies, rules, and regulations to ensure that buildings, condominiums, villages, towns, and subdivisions are all built with facilities, such as cable entrances, ducts, and

risers, that allow non-discriminatory and non-exclusive access to multiple service providers, in order for PTEs and ISPs to provide Internet service;

- c) In case of a dispute arising from an infrastructure-sharing arrangement, the DICT shall:
 - i. Coordinate with the regulator of the infrastructure;
 - ii. Mediate between a PTE or ISP and an infrastructure owner, which may include a PTE, an ISP, or a public service network provider; and/or
 - iii. Serve as the primary enforcer of this provision.
- d) The DICT shall encourage the use of existing infrastructure, such as those of cable TV operators, to fast-track the layout of networks, to increase coverage, and to address the problem of unserved and underserved areas;
- e) The regulator of the shared Infrastructure shall, in consultation with concerned stakeholders, determine and ensure reasonable rental rates for use of shared infrastructure such as, but not limited to, utility poles, utility corridors and ducts; and
- f) For shared infrastructure arrangements, the DICT shall also look into the following considerations:
 - i. Technical feasibility of the request of access seeker to use infrastructure;
 - ii. Incentives to encourage investment in less commercially viable areas;
 - iii. Fair and reasonable rates for shared facilities, depending on the location and market size in a particular area.

All policies, rules, and regulations under this Section shall be operationalized within one (1) year from the effectivity of this Act.

Section 14. Penalties. – The NTC may, motu proprio or upon complaint of any interested party, in the appropriate administrative and/or quasi-judicial process, and in accordance with due process, shall:

- a) Require any PTE or ISP, who shall not meet the requirements set forth under, or shall not comply with the provisions of this Act, to comply with service standards that have not been met, or provisions of this Act that have been violated;
- b) Impose upon entities who do not comply with Internet service standards as laid down by Sections 4, 5, and 8 of this Act and as prescribed by the NTC:
 - i. The penalty of a fine of not less than two hundred thousand pesos (P200,000) but not more than two million pesos (P2,000,000.00) for each count of violation. Provided, that if a service provider has a gross annual income not exceeding Ten Million Pesos (PHP 10,000,000.00), the penalty shall be equivalent to one percent (1%) to two percent (2%) of its gross annual income; and
 - ii. For repeated violations, revoke the PTE's Provisional Authority or Certificate of Public Convenience and Necessity, or cancel the

registration of an ISP, whichever applies, including the waiving of any pre-termination fees of affected subscribers and timely disbursement of any remaining credits from excessive downtime.

The foregoing is without prejudice to any other remedies available to the NTC under existing law.

Section 15. Implementing Rules and Regulations. – Within sixty (60) days after the effectivity of this Act, the DICT and the NTC shall issue a Joint Memorandum Circular setting forth the rules and regulations to effectively implement the provisions of this Act.

Section 16. Separability Clause. – If any portion or provision of this Act is declared unconstitutional, the remainder of this Act or any provisions not affected thereby shall remain in force and effect.

Section 17. Repealing Clause. – Any law, presidential decree or issuance, executive order, letter of instruction, rule or regulation inconsistent with the provisions of this Act is hereby repealed or modified accordingly.

Section 18. Effectivity. – This Act shall take effect fifteen (15) days following its complete publication in a newspaper of general circulation.

Approved,