

1. USO Background

1.1 NBTC Background

The National Broadcasting and Telecommunication Commission or NBTC is an independent government agency established by the virtue of the Organization to Assign Radio Frequency and to Regulate the Broadcasting and Telecommunications Services B.E. 2553 (A.D. 2010) which was enacted in accordance with Section 47 of the Thai Constitution B.E. 2550.

(1) The Establishment of the Post and Telegraph Department

1. **On 4 August 1883** His Majesty the King Chulalongkorn pleased to establish **the Post Department**, and as telecommunication started its role in Thailand, **the Telegraph Department** was also established concomitantly.
2. **In 1898**, His Majesty the King Chulalongkorn pleased to merge the two departments into the Post and Telegraph Department, under the leadership of His Royal Highness Prince Bhanurangsi Savangwongse who was the first Director-General of the department.

After taking a membership in the Universal Postal Union (UPU) which was established in 1863 and the International Telecommunication Union (ITU) which was established in 1865, the international communication system has been established around the world, including 3 key services:- postal services, financial services, and telecommunication services. Particularly for telecommunication works, there have been the development and the introduction of new technologies to enhance work efficiency in this area.

(2) The Siamese Revolution of 1932

This event caused several internal changes to the Post and Telecommunication Department. Key functions were segregated into several service units to provide opportunity for those units to generate their own opportunity and to sufficiently satisfy people's needs, as follows:-

- **In 1939:** Works related to domestic radio broadcasting were transferred to the Advertising Department (currently called the Public Relations Department).
- **In 1942:** Works related to civil aeronautical radio were separated as Aeronautical Radio of Thailand Company Limited.
- **In 1948:** Works related to domestic telephone were separated as the Telephone Organization of Thailand (currently called TOT PLC.).

Later **in 1976**, by virtue of the Communications Authority of Thailand Act B.E. 2519 (A.D. 1976), functions under the Post and Telegraph Department were segregated again.

- Postal and telecommunication-related practical works were transferred to a newly established state enterprise called the Communications Authority of Thailand(currently called CAT Telecom PLC.), which was in charge of providing communication services to the public, including postal services, telecommunication services, and financial services.
- The Post and Telegraph Department was responsible for policy-related works and had authority by virtue of the Communication Radio Act B.E. 2498 (A.D. 1955), relating to the management of radio frequency, policy works, academic works, research and development, and works related to both domestic and international communication.

(3) WTO and NTBC: the relationship between World Trade Organization and Telecommunications

Telecommunication is important to the country as it is required huge investment and continuous development of technologies. Consequently, it becomes one of service sectors promoted by developed countries as they have fostered to establish a negotiation on the opening of international trade market in the areas of telecommunications through all forums, including WTO, ASEAN, and FTAs.

- The revision of governance rules, in particular Telecommunication Business Operation Act, to be clearer and to promote free and fair trade.
- The acceleration of the designation of the National Telecommunications Commission (NTC) for the Post and Telegraph Department which would later become NTC Office.

Rules established considered the following important issues.

1. Independence of regulator
2. Transparency of license issuance
3. Criteria for key service providers governance
4. **Establishment of Universal Service standard**
5. Allocation of frequency

The regulator was required to be separated from telecommunication infrastructure service providers and shall have no accountability against any telecommunication service provider under WTO's provisions. This resulted in the clear separation of regulator's and operator's roles.

(4) The establishment of NTC Office

In 2000, the Office of National Telecommunications Commission or **NTC Office** was established by virtue of the Organization to Assign Radio Frequency and to Regulate the Broadcasting and Telecommunications Services B.E. 2553 (A.D. 2010), resulting in the transfer of business, properties, entitlements, duties, liabilities, and budget of the Post and Telegraph Department to *the Office of National Telecommunications Commission*, including the transfer of all civil servants and employees of the former Post and Telegraph Department.

(5) The Establishment of NBTC Office

In 2010, the Organization to Assign Radio Frequency and to Regulate the Broadcasting and Telecommunications Services B.E. 2553 (A.D. 2010) has been enforced, causing the merging of NTC and NBC as a newly established NBTC, on 20 December of the same year. The Organization for Wave Frequencies Allocation and Supervision of Radio Broadcasting Business, Television Broadcasting Business, and Telecommunication Broadcasting Business Act B.E. 2553 (A.D. 2010) has entered into force since 20 December 2014, terminating the status of NTC and establishing a new status of NBTC.

In this regard, key missions of NBTC Office include 2 parts, including broadcasting and telecommunication business.

Role and responsibility on radio and television broadcasting business

Section 27 (4) To license and regulate the use of radio frequencies and radio communication equipment in the undertaking of sound broadcasting, television broadcasting and telecommunications services, or radio communication service; and prescribe licensing criteria and procedures, conditions, or licensing fees;

Section 27 (6) To license and regulate the operations of sound broadcasting, television broadcasting and telecommunications services to allow service users to have choices of services with quality, efficiency, timeliness, reliability and fairness; and prescribe licensing criteria and procedures, conditions, or licensing fees;

Section 27 (8) To prescribe criteria and procedures for interconnection, and criteria and procedures for setting access charges or interconnection charges to be applied to the undertaking of sound broadcasting, television broadcasting and telecommunications services, both for the same type of business and other type of business, which shall be fair to service users, service providers and investors, or between the telecommunications service providers with due regard to public interest;

Section 27 (9) To set tariff structure and price structure for sound broadcasting, television broadcasting and telecommunications services which shall be fair to service users and service providers with due regard to public interest;

Section 27 (10) To set standards and required technical specifications for sound broadcasting, television broadcasting, telecommunications and radio communication services

Section 27 (11) To prescribe measure for the prevention of anti-competitive conduct or unfair competition in sound broadcasting, television broadcasting and telecommunications services;

Section 27 (13) To protect right and liberty of the people from being exploited by the operators; protect individual right of privacy and freedom to communicate by means of telecommunications; promote right, freedom and equality of the people in the access to, and use of frequencies in the sound broadcasting, television broadcasting and telecommunications services;

Section 27 (16) To monitor and provide advice on the undertaking of sound broadcasting, television broadcasting and telecommunications services;

Section 27 (18) To promote a formation of licensees, broadcasters, and mass media professionals in the radio and television businesses into diverse forms of organizations which will have the mandate to set forth ethical standards and self-regulation pertaining to the occupation or profession under the ethical standards.

Role and responsibility on telecommunications business

Section 27 (4) To license and regulate the use of radio frequencies and radiocommunication equipment in the undertaking of sound broadcasting, television broadcasting and telecommunications services, or radiocommunication service; and prescribe licensing criteria and procedures, conditions, or licensing fees;

Section 27 (6) To license and regulate the operations of sound broadcasting, television broadcasting and telecommunications services to allow service users to have choices of services with quality, efficiency, timeliness, reliability and fairness; and prescribe licensing criteria and procedures, conditions, or licensing fees;

Section 27 (7) To license and regulate the use of telecommunications numbers; and prescribe licensing criteria and procedures, conditions, or licensing fees;

Section 27 (8) To prescribe criteria and procedures for interconnection, and criteria and procedures for setting access charges or interconnection charges to be applied to the undertaking of sound broadcasting, television broadcasting and telecommunications services, both for the same type of business and other type of business, which shall be fair to service users, service providers and investors, or between the telecommunications service providers with due regard to public interest;

Section 27 (9) To set tariff structure and price structure for sound broadcasting, television broadcasting and telecommunications services which shall be fair to service users and service providers with due regard to public interest;

Section 27 (10) To set standards and required technical specifications for sound broadcasting, television broadcasting, telecommunications and radio communication services

Section 27 (11) To prescribe measure for the prevention of anti-competitive conduct or unfair competition in sound broadcasting, television broadcasting and telecommunications services;

Section 27 (12) To prescribe measure for the provisions of telecommunications services universally and equally in accordance with Section 50;

Section 27 (13) To protect right and liberty of the people from being exploited by the operators; protect individual right of privacy and freedom to communicate by means of telecommunications; promote right, freedom and equality of the people in the access to, and use of frequencies in the sound broadcasting, television broadcasting and telecommunications services;

Section 27 (16) To monitor and provide advice on the undertaking of sound broadcasting, television broadcasting and telecommunications services.

(6) The Establishment of the Universal Service Obligation

The Telecommunication Business Act B.E. 2544 (A.D. 2001) Section 17 and Section 18 set out the establishment of the Universal Service Obligation, together with the Organization to Assign Radio Frequency and to Regulate the Broadcasting and Telecommunications Services B.E. 2553 (A.D. 2010) Section 27 (12) and Section 50 set out the arrangement of plan for the organization of the Universal Service Obligation.

By virtue of the aforementioned acts, the National Broadcasting and Telecommunication Commission (NBTC) plays an important role in organizing the Universal Service Obligation, including operations both in area and social aspect under the Model Scheme of Telecommunication Business 2012 – 2016 in support of the Universal Service Obligation Service Provision Plan 2012 – 2016.

1.2 USO (Universal Service Obligation)

This is the operations for all people, including underprivileged people and people living in rural areas to be accessible to telecommunication infrastructure with east at the appropriate service rate, as well as to allow information accessibility throughout the country on equal basis, in order to bridge the gap or digital divide. This is considered a key mission of the office as it is responsible for regulating all telecommunication entrepreneurs to mutually share the responsibility or to allocate their partial revenue received from telecommunication services provision to the Broadcasting and Telecommunications Research and Development Fund for the Public Interest (BTFP).

Digital Divide

1. Availability > Lack of Services > Throughout Scattering of Services
2. Accessibility > Gaps in Skills to Access Services > Appropriate Service Rate
3. Affordability > Economic Status > Ease of Access to Services of People

Concept

The scattering of telecommunication services to bridge gaps in the accessibility to telecommunication infrastructure of people, both in area and social target perspective.

Definition of Telecommunication Infrastructure

“**Telecommunication Infrastructure**” refers to telephone and high-speed internet services without limiting to type of technology and its purpose of use, including router, software, or any other compositions required, as well as the organization in promoting and enhancing knowledge and skills which are useful for people to have appropriate and efficient accessibility to the telecommunication infrastructure.

1.3 Previous Implementation Results of NBTC Office on the Universal Service Obligation

1.3.1 Phase 1 of USO Implementation Results (2006 – 2009)

- Public telephone booths were installed in 6,000 villages (12,000 lines);
- Public telephone booths and stations were installed at 4,000 health stations (8,073 lines);
- 1 Million telephone cards are distributed to people with disabilities and senior people;
- Public telephone booths for less-income communities were installed in 1,159 communities (1,293 lines);
- 8,135 lines of Public telephone with devices were distributed to people with disabilities; and
- 248 lines of Public telephone booths and stations were installed at 4 Border Patrol Police schools.

1.3.2 Phase 2 of USO Implementation Results (2010)

Public telephone booths were installed in 2,356 villages (2,359 lines).

There were 520 School USO NET Centers established.

There were 420 Community USO NET Centers and USO NET Centers at social organizations.

1.3.3 Phase 3 of USO Implementation Results (Under USO Service Provision Plan 2012 - 2016)

NBTC is required to provide USO services in rural areas, low-investment returns areas, and areas with no service provider, or with inaccessible or with insufficient service providers for users, educational institutes, religious places, medical centers, or any social organizations, as well as to provide USO services to less-income people, people with disabilities, children, seniors, and underprivileged people.

Zoning concept is presented in the map, divided into Zone A, B, C1, C2, and C3.

Target for Phase 3 of USO operations is “to expand both wired and wireless telecommunications throughout rural areas by 2017.”

- Expand voice telecommunications services to cover people up to 95 percent of people living in the non-commercial-potential and no-service areas.
- Provide 1-2 lines of public telephone per each village located in the non-commercial-potential and no-service areas.
- Expand high-speed internet connection to serve no-service sub-districts to cover more people at least 80 percent.
- Provide community USO NET Centers in non-commercial-potential and no-service areas.