

# Universal Service Supply for Basic Telecommunications Services and Social Service (Universal Service Obligation: USO)

## Background

Universal Service Obligation in Thailand was implemented under the scope of powers and duties defined under Section 27 (12) and Section 50 of the Act on Organization to Assign Radio Frequency and to Regulate the Broadcasting and Telecommunications Services B.E. 2553 (2010) and Section 17 of the Telecommunications Business Act B.E. 2544 (2001) which assigns NBTC to be responsible for providing universal service supply for basic telecommunications services covering both spatial and social dimensions.

The key principle of Universal Services Obligation (USO) is to provide universal service supply for basic telecommunications services covering both spatial and social dimensions with the aim to mitigate the problem of digital divide within the country.

It is undeniable that most entrepreneurs, particularly in a highly competitive free market, tend to focus on making investments in high potential areas. This causes most infrastructure developments to take place in urban areas, leaving remote and rural population to be deprived of equal access to telecommunications services when compared to urban population.

Hence, serious actions must be taken in order to drive investments and infrastructure developments in remote and rural areas that are still lacked of telecommunications service access based on the principles of environmental-friendliness, free competition and fairness.

Upon considering telecommunications service access, the problems of subsidy for infrastructure development expansion and digital divide can be observed from spatial and social dimensions, respectively, both of which are contributing factors to limiting telecommunications service access of each individual group namely the disabled, the elderly, children, low-income and non-ICT literacy groups.

In summary, Universal Service Obligation (USO) aims to resolve the problem of digital divide in three following aspects:

1. Ensuring universal availability of telecommunications network

2. Ensuring accessibility of telecommunications services among the special need groups and promoting ICT literacy development.
3. Providing affordable telecommunications services to allow universal and equal access among low-income group.

## Definition of Basic Telecommunications Services

“Basic Telecommunications Services” refers to telephone and broadband internet services regardless of the technology used, usage type, endpoint device, software and any other necessary components. It also involves promoting and enhancing essential skills that will enable the overall population in gaining access to basic telecommunications services appropriately and efficiently.

USO operations can be funded under various budget schemes depending on the legal framework enforced in each country. In Thailand, telecommunications business regulatory body has been assigned by law to be responsible for collecting partial revenue generated by licensed service providers as subsidization for the country’s USO operations in order to reach the set up goals.

## USO Targets

The targets for Thailand’s Universal Service Obligation (USO), which follows the international standard since its initiation in 2005, can be divided into three following phases:

- Phase 1: from 2005 - 2009

To focus on expanding VoIP service accessibility in rural areas by installing public telephone service among villages in remote areas totaling 6,000 lines and fixed service at local public health centers and low-income communities nationwide totaling 4,000 lines and 2,600 lines, respectively, including providing public telephone service for the blind by over 5,000 lines nationwide.

- Phase 2: from 2010 – 2011

Uplifting service quality by increasing accessibility to telecommunication and public internet services among rural population in remote areas in order to support the changing consumer trend regarding the use of telecommunications services which has currently began to shift toward information access via telecommunication network. This is achieved by:

- (1) Establishing USO NET Centers among 520 schools in remote areas nationwide.
- (2) Establishing USO NET Centers among 379 communities in remote areas nationwide.

- (3) Establishing over 40 USO NET Centers among nationwide to satisfy the needs of different disability groups.

- Phase 3: from 2012 – 2016

The implementation of the above mentioned phases together with the promotion of policies and rules in relation to the regulation of telecommunication business based on free and fair competition has allowed continuous growth in Thailand's telecommunication market whereas the lowering service fees has allowed wider accessibility among the overall population.

Based on NBTC database in 2012, Thailand's personal telephone network service penetration reached 94 percent of the overall population whereas broadband internet network service penetration remained only at 39 percent despite of the declining service rates per megabit since 2005.

For this reason, NBTC must therefore accelerate its progress in supporting and driving investments for broadband network developments in rural areas or lower potential areas or areas with limited or no service access to ensure wider accessibility and coverage of broadband service among these areas, including supporting and promoting the development of ICT-related knowledge and skills among particular groups namely low-income, the disabled, children, the elderly and underprivileged groups and encouraging the development of ICT innovations and applications on telecommunications network that can satisfy the needs of diverse population groups in hope to enhance the country's overall capacity and competitiveness.

This has therefore led to the establishment of phase 3 in which NBTC have formulated its 5-year targets under the Master Plan for Universal Service Obligation B.E. 2555 – 2559 (2012 – 2016) as per the following details:

- (1) Personal telephone service penetration must not be less than 95 percent of the country's overall population by providing 1-2 public telephone service lines per village in areas with low commercial potential and service access.
- (2) Broadband service penetration must not be less than 80 percent of the overall population by
  - Establishing internet service centers among local communities, academic institutions and sub-district health promoting hospitals in areas with no commercial potential and service access.
  - Establishing over 500 broadband service centers nationwide for certain social target groups namely low-income, the disabled, children, the elderly and the underprivileged groups.

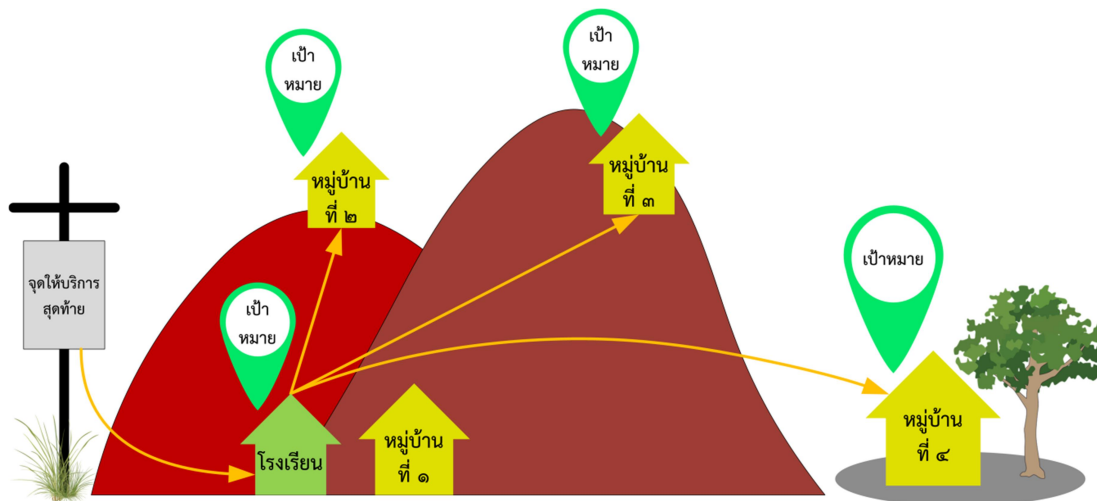
- Establishing telecommunication services (TTRS and DAISY) specifically designed for the disabled group to enable information access among over 100,000 people with disabilities.
- Promoting and supporting the development of essential skills and knowledge among at least 500,000 people, particularly the low-income, the disabled, children, the elderly and the underprivileged groups.
- Studying and analyzing various approaches for the integration of emergency number as part of Universal Service Obligation (USO).

## USO Operational Results

The overall operational results following the implementation of Thailand's Universal Service Obligation (USO) under the Master Plan for Universal Service Obligation B.E. 2555 – 2559 (2012 – 2016) can be summarized as follows:

### Infrastructure Development for Telecommunication and Broadband Services

One of the core strategies set up under Thailand's Digital Economy Plan is the development of high-performance digital infrastructure with the aim to ensure broadband service accessibility in every village nationwide. To achieve this, NBTC and Ministry of Information and Communication Technology (currently known as Ministry of Digital Economy and Society) had collaboratively determined and assigned target areas to be responsible by each party regarding the expansion of broadband service coverage to ensure accessibility of 44,352 villages nationwide at connectivity speed of no less than 30/10 Mbps. for both cable (Fiber to the x: FTTx) and wireless (Satellite) systems in accordance with governmental policy. Of this number, 24,700 villages were under the responsibility of the Ministry of Digital Economy and Society whereas the other 19,652 villages were under the responsibility of NBTC. The target areas included schools under the Office of the Basic Education Commission (OBEC), Sub-district Health Promoting Hospitals, schools supported by educational funds and Royal Project Foundations.



Assumption: optic fiber network deployment among schools with USONET covering 4 targeted villages.