

NATIONAL BROADBAND POLICY

1. Background

Article 78 of the Constitution of the Kingdom of Thailand B.E. 2550 (2007) calls for the state to undertake public administration in order to develop the society, economy and security of the country in a sustainable manner. This includes the creation and provision of public services, public utilities, and comprehensive local information infrastructure that is equal throughout the country. The government has tabled to the Parliament on 29 December 2008 its policy to develop a universal communication network and to allow people to have equitable access to such services. The government has also developed the Information and Communication Technology Policy Framework (2011-2020) or ICT 2020 in order to serve as the framework for developing ICT. The Framework targets delivering ICT infrastructure as a basic public utility that all citizens can access universally, with world-class quality and security standards by the year 2020.

The government is aware of the role and significance of developing broadband service within the scope of the ICT 2020 Policy Framework as part of the country's development, in terms of the economic and social dimensions, public services, environmental protection and also safety and security for people's lives and Broadband service will contribute to the continuous expansion of Thailand's Gross Domestic Product (GDP). It is also an important element of telecommunications, broadcasting and television businesses. In any case, the development of the country's broadband service is still in a rudimentary state at the moment, when compared to other countries. Broadband is only utilized by 3.5 percent of the population, who are mainly clustered in the capital and big cities. This has led to the problem of inequality and digital divide between the urban and rural population, and is also a factor that impacts on the competitiveness of Thailand in the long term.

As such, the government has established the National Broadband Policy in order to ensure clarity and to serve as a framework for implementing and driving the development of broadband service which will make use of diverse technologies, be advanced and up-to-date, and in tune with the context and situation of Thailand. In addition, it will also answer the needs of all sectors, with the government setting the policy and supporting the creation and use of broadband in a comprehensive and equitable manner. Furthermore, it will also promote the participation of the private sector and people in successful implementation. An independent supervising body, in accordance with the law, will oversee the operation of enterprises to ensure free and fair competition.

2. National Broadband Policy

- 2.1 The government intends to support the development of broadband service, which is considered an important fundamental public utility for the people, in a manner that is universal, sufficient, at a reasonable cost, and under conditions of free and fair competition.
- 2.2 Every Thai person should be able to fully access and make use of the improved broadband service, which will help to reduce inequality and narrow the digital divide, in both geographic terms and among groups of people. It will help bring progress to all regions of the country and enhance the quality of life of the people.

- 2.3 The government and private sector should be able to fully access and make use of improved broadband, in order to sustainably improve national productivity and competitiveness.
- 2.4 In developing broadband service, the government will manage telecommunications resources in which the government has already invested, and in which it may continue to invest, in order to benefit all telecommunications businesses in an impartial manner. The management system will be improved to achieve higher productivity. The government will not monopolize the market as the sole investor providing various services, but will open up the opportunity for all enterprises which have the intention and the capacity to invest in service provision. In sum, this will lead to a broadband network for the whole country, with free and fair competition in service provision.
- 2.5 In all matters related to national sovereignty, for instance, satellite orbit positions, underwater cable landing points, or the connection points of transboundary networks, these will be considered important for national security and will be the right or property for the state to utilize for the highest benefit. In meeting domestic needs and in building capacity and opportunities for international cooperation and trade, the government will establish policies and supervise the implementation of the policies. Private sector enterprises will participate in investing in providing such services.
- 2.6 The government will support both fixed-line and wireless last-mile telecommunications businesses, ICT businesses, content producers, broadcasting businesses, television businesses and e-commerce businesses.

3. Objectives

- 3.1 Develop the broadband network to provide access to at least 80 percent of the population by 2015 and at least 95 percent by 2020, ensuring standard quality of service and reasonable service fee. In addition, cities that are economic and regional hubs should have high-speed fiber optic cable broadband with a minimum speed of 100 Mbps by 2020.
- 3.2 People should be able to universally and equitably access education, public health, disaster monitoring and warning, and other public services through a broadband network in order to reduce inequality in accessing public services and knowledge, through the following:
 - 3.2.1 Increase education opportunities by allowing sub-district-level schools to access quality broadband service by 2015 and schools around the country to access these services by 2020.
 - 3.2.2 Expand public health services by ensuring that all sub-district hospitals and health centers can access broadband service of equal or comparable quality to the service in provincial hospitals. Furthermore, ensure connection and provision of health insurance and social security services through the broadband network by 2015.
 - 3.2.3 Expand e-government services through the broadband network, with all sub-district administrative organizations in the country able to access broadband service of equal quality compared with provincial administrative organizations and central government agencies. This will allow people in all sub-districts to avail of various services provided by the e-government system at all times by 2015.
 - 3.2.4 Put in place a national disaster and emergency monitoring and warning system on a broadband network, which will allow the people to have accurate information in a timely manner.

- 3.3 The Thai business sector can access and utilize the broadband network in a universal and equitable manner to enhance national competitiveness and economic growth in a balanced and continuous manner. The broadband network will be a major factor in developing the Thai economy through the following:
- 3.3.1 Enhance national competitiveness of technological infrastructure to be in the top 25 percent of countries in the World Competitiveness Rankings.
 - 3.3.2 Economic growth that uses creativity, design, and new services can be carried out in all parts of the country through the broadband network, which will lead to disseminating revenue in non-urban areas.
 - 3.3.3 E-commerce will expand to account for 10 percent of GDP by 2015.
- 3.4 Reduce energy consumption and resource use by communicating or accessing information jointly through broadband service in the manufacturing and service sector, which will lead to better environmental protection and reduce global warming.
- 3.5 Reduce overall broadband service delivery cost, especially in connecting to international circuits and delivering broadband to users, in order to reduce broadband service fee. Broadband consumers can access the service in a more widespread manner.
- 3.6 Content and applications will be developed for education, public health, personal and property protection, religion and culture, environmental protection, and modern lifestyle, along with enhancing business competitiveness.
- 3.7 People will have knowledge and understanding about the value and risks of using ICT which are accelerating due to the expansion of broadband service. They will also have knowledge and skills in using broadband in a creative and productive manner.
- 3.8 The ICT manufacturing industry will develop, grow and upgrade its products to meet world-class standards.

4. Guidelines

4.1 Developing broadband infrastructure and service

- 4.1.1 Promote competition among broadband service providers, on the principle of free and fair competition, which will not be monopolistic and will be open to various technologies. This will aim to stimulate investment in the network and expand services in an efficient, universal, quality manner and at a reasonable price.
- 4.1.2 Promote the expansion of broadband services into the remote rural areas, in accordance with the principles of Universal Service Obligation and service for the people.
- 4.1.3 Promote investment and development of the broadband network at all levels in order to ensure adequate capacity, world-class standards and low cost through private or public-private mechanisms. Support the shared use of infrastructure between enterprises in order to reduce redundant costs. This will allow enterprises to use the network under supervision which holds to the rules of free and fair competition, without monopolistic obligations or influencing the market in a way that blocks competition.
- 4.1.4 Promote the organization supervising the allocation of broadcasting frequencies, which is a national resource, among telecommunications, broadcasting, and television businesses, in order to optimize benefits for the people.

- 4.1.5 Promote entrepreneurs, especially local entrepreneurs, to be able to invest in alternative communication technologies and methods which are suitable and affordable in order to build, connect and provide last-mile service in an efficient manner.
- 4.1.6 Adjust the structure and role of state enterprises in telecommunications, broadcasting and television in providing network services so as to facilitate the delivery of broadband service in an efficient manner. Promote free and fair competition for all enterprises.
- 4.1.7 Adjust the structure of the telecommunications industry to fit within the system of permits and competition on the basis of a level playing field, in order to stimulate basic investment and ensure a primary network which is essential for universal broadband service.
- 4.1.8 Promote the development of personnel in telecommunications. Promote research and development in broadband network and services that is up-to-date and has potential for commercial application in order to reduce cost in delivering broadband service to people, lessen dependency on imports and promote development of telecommunications industry, broadcast and television businesses.

4.2 Developing use of broadband

- 4.2.1 Support the extensive use of broadband in order to expand the market and the user base, by promoting the development of diverse applications and content, which can be used in work and daily life. Broadband can also connect e-government systems, educational services, public health services, information services and other public services, which will increase demand for broadband services. The government must be careful not to impact or distort market mechanisms.
- 4.2.2 Promote the development of skills and capacity in using IT (IT literacy) and -information literacy of the people, communities and Small and Medium Enterprises (SMEs) to optimize their use of broadband in an efficient and worthwhile manner, and open opportunities in generating revenue and enhancing their quality of life, especially for the rural population, the disadvantaged and farmers, who make up the majority of the country.
- 4.2.3 Promote the development of entrepreneurs in all types of businesses related to broadband services, such as ICT entrepreneurs, producers of telecommunications devices, Internet administrators, application developers, content producers, broadcasting entrepreneurs, television entrepreneurs, and e-commerce businesses.
- 4.2.4 Develop measures to promote and incentivize the use of broadband, in order to reduce energy consumption and resource use in both manufacturing and service sectors, especially in transport and logistics.

4.3 Ensuring security of the broadband network and the overall safety of the society

- 4.3.1 Develop and upgrade specialists in broadband network security and services in both quantity and quality.
- 4.3.2 Build multiple alternate networks which link Thailand to countries in other regions around the world, without any constraints on format, including underwater cables, terrestrial cables or satellite. Should be increasingly open for investment

in this manner, from the public or private sector or through public-private partnerships.

- 4.3.3 Define measures to protect against negative impacts and threats that may arise from the widespread use of broadband service, by building up understanding among all sectors about the benefits and drawbacks which might occur. Implement measures in a concerted manner in protecting against electronic crime, infringement of personal data and intellectual property.
- 4.3.4 Promote the development of systems and services to manage the infrastructure for important data, for instance, data about land, water, air, traffic or about managing various disasters. Monitoring and warning systems for disasters and emergencies should be developed on the broadband network, so people can receive information on a timely and credible basis. In addition, emergency plans should also be put in place in case the broadband network is damaged by any disasters.
- 4.3.5 Create awareness and provide knowledge about the policy and implementation guidelines concerning information security to ICT administrators in both the private and public sectors, especially the agencies which are involved with key national infrastructure.

4.4 Managing and driving the policy and coordinating supervision

- 4.4.1 The National ICT Committee should integrate working committees which are involved in various aspects and set up a joint sub-committee between the public and private sector. This sub-committee should have the following duties: (1) develop the implementation action plan to achieve the goals of the National Broadband Policy, (2) define the indicators and evaluation method needed in monitoring the achievements of the Policy, (3) propose relevant agencies to implement according to the action plan, and (4) draft periodic progress reports for the Cabinet and the public concerning the implementation of the Policy.
- 4.4.2 Ensure coordination with concerned sectors, including the public sector, private sector and civil society, along with supervisory agencies. This includes integrating goals and workplans, telecommunications resources, and overall investment resources in the country, in order to deliver universal broadband service of good quality at a reasonable rate. In turn, this will allow for jointly achieving the goals in developing the country and enhancing quality of life for the people.
- 4.4.3 Implementing in accordance with this policy will be supported by investment by the public sector or entrepreneurs or from the fund in accordance with the Act on Organisation for Allocating Broadcasting Frequency and Supervising Radio/Television Broadcasting and Telecommunication Businesses, B.E. 2543 (2000).
