

Important Regulatory Issues

1. Telecommunications Number Management, and Mobile Number Portability and Record of Prepaid Mobile Phone Service's Users

The NBTC has a policy to allocate telecommunications numbers efficiently and sufficiently for the operators' service provision and network expansion. It recognizes the importance of an allocation of numbers for public services, business and for national security, as well as for supporting the emergency or disasters. It has therefore devised a telecommunications numbering plan and the criteria for allocation of telecommunications numbers that is in line with the policy on telecommunications resource management. This means that the allocation, supervision, administration and use of telecommunications numbers, which are telecommunication resource, are undertaken in an efficient and fair manner and sufficient for the supply of services on the basis of free and fair competition including protection of service user.

The NBTC's current telecommunications numbering plan is designed to cater for the long-term number demand and support future service provision employing employing innovative technologies. The plan provides types of telecommunications numbers to support services provided by operators which include fixed line number, mobile number, VoIP number, premium service number, technical number as well as short code number. In addition, the NBTC has been managing the telecommunications number allocation according to the NBTC's Notification regarding the Criteria for Allocation and Management of Telecommunication Number, which details the basic principles of telecommunications number management and allocation with a clear and efficient process, including inter alia: guidelines on telecommunications number planning; application procedures for allocation number; rights and duties of holder of allocated numbers and regulating guideline. Besides, the holders of allocated number are duty-bound to pay fee for the telecommunications numbers at the rate specified in the Notification.

The other important duty of the NBTC regarding mobile numbers management that gain interest from the public is the regulation of mobile number portability. This operation is under the NBTC's Notification Regarding the Criteria for Mobile number Portability which outlines rules and guidelines for porting mobile number to another network provider while retaining their existing mobile numbers. Such

number portability not only benefits the users, but also promotes competition in telecommunications services, improves service quality in order to retain the customers as well as supports the optimum utilization of numbers. The Notification also prescribes an investment in a Clearing House for data collection through a consortium of the mobile service providers, with the investment proportion to be specified.

The NBTC has set forth a rule regarding the record of prepaid mobile phone service's users (prepaid SIM card) under the NBTC's Notification regarding the Criteria for Allocation and Management of Telecommunication Numbers. The NBTC has also determines a guideline on the registration of prepaid mobile phone service's users (prepaid SIM card) to be complied by all mobile operators in order to protect the right of mobile phone users as well as to protect the right of mobile phone users as well as to protect the society and national security. Moreover, there is a requirement that, for new number, the mobile operators must register the users' SIM card prior to SIM activation.

2. Telecommunications Network Interconnection

In 2013 the NBTC issued the notification Regarding Telecommunications Network Access and Interconnection B.E. 2556 prescribing criteria and procedures for network interconnection. The Notification requires that a licensee who owns network must allow other licensees to interconnect with its network on a fair, reasonable and non-discriminatory basis.

The Notification also requires the licensee who owns network to develop and submit the Reference Interconnection offer together with supporting document that prescribes principle and method for calculating interconnection charge. Such interconnection charge must be cost-oriented and calculate on long run incremental cost basis. The charge for necessary facilities for interconnection must also be cost-oriented. The NBTC, however, may impose a certain calculation method and appropriate reference interconnection charge for certain interconnection services.

In addition, this Notification also provides guidelines for contractual arrangements as well as dispute resolution procedure in the case where there is any refusal of network interconnection or access for which the petition should be submitted within one year as from the date of the refusal or the date the

dispute regarding network interconnection or access arises. During the dispute settlement process, the NBTC may order temporary access or interconnection following conditions in the existing contract, conditions in the same type of contract or use the calculation method for interconnection charge that the NBTC has issued the Notification Regarding Standard Method for Calculating Interconnection Charges B.E. 2556 (2013) to be the calculation standard for the transparency.

Furthermore, in year 2014 the NBTC has issued the Notification Regarding the Reference Interconnection Charges B.E. 2557 (2014) which applies the calculation method according to the Notification regarding the standard method for Calculating Interconnection Charges mentioned-above. The purpose of this Notification is to set fair regulatory guideline and fair interconnection charge for telecommunications service users where an agreement regarding the charges cannot be reached among the licensees, where there is a dispute regarding the charge of where temporary charge is required.

3. Telecommunications Network Access

The NBTC's Notification Regarding Telecommunications Network Access and Interconnection B.E. 2556 also prescribe criteria and procedures for network access. The Notification requires that a licensee who owns network must allow other licensees to access to its network on a fair, reasonable and non-discriminatory basis.

The Notification also requires the licensee who owns network to develop and submit the Reference Access offer together with supporting document that prescribes principle and method for calculating access charge. Operators are permitted to determine the access rate among themselves via commercial negotiations on a fair, reasonable and non-discriminatory basis. The NBTC, however, may impose a certain calculation method and appropriate reference interconnection charge for certain interconnection services.

In addition, this Notification also provides guidelines for contractual arrangements as well as dispute resolution procedure in the case where there is any refusal of network interconnection or access for which the petition should be submitted within one year as from the date of the refusal or the date the dispute regarding network interconnection or access arises. During the dispute settlement process, the

NBTC may order temporary access or interconnection following conditions in the existing contract, conditions in the same type of contract or as the NBTC sees appropriate.

4. Infrastructure Sharing for Mobile Network

In order to promote free and fair competition and to bring the quality and efficient service to the consumers, the NBTC has prescribed the Notification Regarding Infrastructure Sharing for Mobile Network B.E. 2556 (2013) which requires the licensee (Type III and the mobile operators under concessions) to permit other licensees to share its own infrastructure for mobile network. The Infrastructure sharing includes tower and mast, base station area, transmission network between base station controller. In sharing its own network, the licensees must treat other licensees on a fair, reasonable and non-discriminatory basis and the infrastructure sharing charge can be determined among licensees on a fair, reasonable and non-discriminatory basis. In addition, this Notification has also prescribed criteria and procedures for contract negotiation and dispute resolution where an agreement cannot be reached among the licensees.

5. Domestic Mobile Roaming Services

The NBTC has prescribed the Notification Regarding Domestic Mobile Roaming Services to promote free and fair competition and to enable nationwide service to consumers. This Notification requires the licensees (Type III mobile operators and mobile operators under concessions) to allow other mobile operators to roam on its own network except the licensees network is non-interoperable with the roamer's network due to different standard and technology employed. Furthermore, the licensee must treat other licensees on a fair, reasonable, and non-discriminatory basis and the domestic mobile roaming charge can be determined among the licensees a fair, reasonable, and non-discriminatory basis as well as must be reasonable comparing with the retail rate paid by its customers. In addition, this Notification has also prescribed criteria and procedures for contract negotiation and dispute resolution where an agreement cannot be reached among the licensees.

6. Mobile Virtual Network service

The NBTC has prescribed the Notification Regarding Mobile Virtual Networks Service B.E. 2556 (2013) to promote free and fair competition as well as to promote market entry for small entrant in order to escalate mobile service competition and provide service alternatives to customers. The Notification requires the licensee (Type III mobile Operators and mobile operators under concessions) who is a wholeseller to treat Mobile Network Operators (MVNs) on a fair, reasonable and non-discriminatory basis and charge can be determined by the agreement between the wholeseller and MVNOs on a fair, reasonable, and non discriminatory basis as well as must be reasonable comparing with the retail rate paid by the wholeseller's customers. In addition, this Notification has also prescribed criteria and procedures for contract negotiation and dispute resolution where an agreement can not be reached among the licensees.

7. Setting of Service Tariff

The NBTC regulates service fees in accordance with the "NBTC's Notification Regarding Maximum Rate of Service Tariff and Advance Collection of Service Tariff in Telecommunication Business B.E. 2559 (2006)". The said notification aims at protecting service users and promoting efficient in Thai telecommunications market on a free and fair basis. The Notification specifies the methods for determining maximum rate of service tariff that is fair to operators and users, as well as specifies the duty of operators to report the service tariff which enables the NBTC to monitor whether the service tariff is in appropriate level or conducive to any anti-competitive or discriminatory practices and affect the service users or not. In addition, the Notification also specifies criteria and procedures to obtain the NBTC's permission for advance collection of service tariff.

Following the above-mentioned Notification, in 2012 the NBTC issued the Notification Regarding Maximum Rate of Service Tariff for Domestic Mobile Voice Service B.E. 2555 (2012)" which determines the maximum rate of mobile voice service tariff at 99 Satang per minute, applicable solely to the operators with significant market power (SMP) according to the NBTC's order in 2010. Later on, in granting the 2.1 GHz spectrum licenses in December 2012, one of the license conditions mandates that the tariffs of voice and non-voice services must be reduced in average by a least 15% of the average market

price at the day the licenses are granted. Such condition is however presumed as a specific measure for regulating services tariff for service on 3G network.

Currently, the NBTC is reviewing overall mobile service tariff regulation to be up to date and suitable with the market environment. In doing so, the NTC has approved in principle for the determination of the maximum rate of service tariff by using Price Cap methodology which is expected to become effective within year 2015.

8. Measure for the Prevention of Monopoly and the Identification of Market Power in Telecommunication Business

The NBTC implements two types of competition regulation - the ex-ante and ex-post regulation. Ex-post regulation is governed by the NTC Notification on Measures to Prevent Monopolistic and Unfair Competition Practice in Telecommunications Business B.E. 2549 (2006), which aims to ensure free and fair competition among telecommunications service providers and to promote and support competition in and development of the telecommunications industry in an efficient and sustainable manner. The Notification prohibits operators who have been deemed to have Significant Market Power (SMP) from carrying out certain anti-competitive practices such as service subsidization and cross service subsidization for the service or the business under competition. The Notification also institutes a process of inquiry dealing with the licensee who acts or behaves in such manner, as a standard of practice for the NBTC.

For the ex-ante regulation, in 2014 the NBTC issued two key notifications. The first is the NBTC Notification on Market Definition and Relevant Markets in Telecommunication B.E. 2557 (2014), and the second is the NBTC Notification on Criteria and Procedures for Identifying Operators with Significant Market Power in Telecommunications Business B.E. 2557 (2014). According to these Notifications, the Office of the NBTC must prepare a report on analysis of the level of competition in the relevant markets and propose a list of operators with SMP in each relevant market for the NBTC's consideration. This will be used as a basis for outlining measures for the supervision of anti-competitive behaviors in telecommunications market in alignment with the above-mentioned Notification, and also for formulating

a guideline to prevent the operators with SMP from abusing their market power to restrict or hinder free competition in the market.

The NBTC additionally issued the Notification Regarding Criteria and Procedure for Accounting Separation in Telecommunication Business as a tool to support the implementation of measures for the prevention of monopoly of unfair competition in telecommunications business. Under the Notification, the operators with SMP are required to undertake accounting separation for the NBTC's analysis. This aims to:

- Identify the anti-competitive behaviors such as predatory pricing, margin squeeze, etc.
- Identify the discriminatory behaviors such as cross subsidization, a case in which the operators with SMP set an overly high price in a market where they have powers and use the received profit for cross subsidization in another market where they are inferior to their rivals; and
- Be a basis for determining the cost-based wholesaling and retailing rates without excessive return/profit.

9. Universal Basic Telecommunications and Social Service

Telecommunication plays an important role in people communication and also in promoting capability development in other sectors such as manufacturing sector, trade and commerce sector as well as public and private service sectors. Therefore, the distribution of Universal Basic Telecommunications and Social Service will minimize the gap in communication and technology access which will improve the quality of life of the people in remote areas and bring about the equality and fairness in standard of living for all citizens both in the city and the remote areas. This will finally affect the national competitiveness level.

With all reasons mentioned above, the Telecommunications Master Plan B.E. 255-2559 (2012-2016) aims to adopt measures to encourage operators in providing basic telecommunications services universally, promote the provision of basic telecommunications services to the underprivileged in accordance with the Universal Basic Telecommunications Service and Social Services Plan to ensure the

access to quality telecommunications service at a reasonable tariff, to foster the provision of telecommunications service for social development and quality of life improvement as well as to improve the capability of telecommunications device manufacturing and telecommunications service for the disabled and the underprivileged.

In 2012, the NBTC has issued the NBTC's Notification Regarding Plan on Universal Basic Telecommunications Services and Social Services (B.E. 2555-2559) (2012-2016) aiming to promote and encourage nationwide distribution of wireline and wireless telecommunications network as well as to provide opportunity and develop capability in internet access for the underprivileged, the disabled, children, and senior citizens which will improve quality of life and the overall national competitiveness level. Subsequently, the NBTC has issued the NBTC's Notification Regarding the Criteria and Procedure for Revenue Collection to Fund the Provision of Universal Basic Telecommunications Services and Social Services which prescribes the criteria and procedure for revenue collection from telecommunications service licensees for contribution to the Broadcasting and Telecommunications Research and Development Fund for the Public Interest. This is in order to secure funding for the implementation of the said Plan on Universal Basic Telecommunications Services and Social Service. The basic telecommunications services selected to be offered are telephone service and high speed internet service with on limitation of technology employed and the applications which include terminal equipment, software or other necessary peripherals. The goal is also include promotion and improvement of knowledge and skill which will benefit to the public for the appropriated and efficient access to the basic telecommunication services. Moreover, the licensees with their own network are required to annually contribute to the Fund at the amount of 3.75% per year of their net income from their telecommunications services as defined in the said notification.

It is expected that, after the successful implementation according to the Universal Basic Telecommunications and Social Services Plan (B.E.2012-2016), the personal telephone penetration rate will be at least 80% of Thai population. Also, there will be internet community center, internet service in school, internet service in community hospital as well as internet service center for target groups nationwide and telecommunications system for the disabled to access to information as others.

10. Current Spectrum Assignment for Telecommunication Services in Thailand

The utilization and the regulation of radio frequencies spectrum in telecommunication business is mandated by the Act on the Organization to Assign Radio Frequency and to Regulate the Broadcasting and Telecommunications Services B.E. 2553 (2010) (the Organization Act) and the Telecommunications Business Act, B.E. 2544 (2001).

Section 46 of the Organization Act states that a spectrum license for telecommunications business is the exclusive rights and is not transferable. The license who has been authorized to use spectrum shall carry out the services by himself or herself. Also, business management either in whole or in part shall not be rendered or permitted to other to act on his/her behalf.

In addition, Section 47 of the Organization Act stipulates that for any licensee who has been authorized to use spectrum for telecommunications services that has no carried out the business by using such spectrum within period specified by the NBTC, or by using such spectrum in other services not relating to its objectives, or fails to comply with the business operation conditions, or conducts any prohibitive acts as specified in Section 27 (11) or fails to comply with the provision of Section 46, the NBTC shall take action to rectify the situation or issue an order to revoke the spectrum license in whole or in part.