

National Broadcasting and Telecommunications Commission (NBTC)



2014



### **Executive Summary**

#### NBTC Annual Report 2014

The Act on Organization to Assign Radio Frequency and to Regulate the Broadcasting and Telecommunications Services B.E.2553 (2010) which has become effective since 20 December 2010 onwards prescribed that there shall be a National Broadcasting and Telecommunications Commission, called "the NBTC" in short, to be responsible for assigning the frequencies and regulating the broadcasting and telecommunications business by taking into consideration the utmost public benefit at national and local levels in terms of education, culture, state security and other public interests as well as free and fair competition. This includes promoting the public participation in the public media operation. On 7 October 2011, the Royal Proclamation appointed the National Broadcasting and Telecommunications Communication, under Section 17 of the Act on Organization to Assign Radio Frequency and to Regulate the Broadcasting and Telecommunications Services B.E.2553 (2010), and the National Broadcasting and Telecommunications Commission (NBTC) has commenced its 3<sup>rd</sup> anniversary performance on 7 October 2014 with the support of the Office of NBTC for the administrative works of the NBTC.

The operation of NBTC throughout these periods has been focused on the mission which are necessary, urgently needed, and in continuation on from year 2013, which put effects on the economic, social and national development. Also, the operation of the NBTC has been carried out under the implementation guidelines of the Strategic Plan of the 3 Master Plans consisting of Spectrum Management Master Plan (2012), Broadcasting Master Plan No.1 (2012-2016), and Telecommunications Master Plan No.1 (2012-2016), as well as the Strategic Plan of the Office of NBTC (2014-2016).





### Message

from the Chairman of the National Broadcasting and Telecommunications Commission (NBTC)

The National Broadcasting and Telecommunications Commission (NBTC) has commenced its 3<sup>rd</sup> anniversary performance on 7 October 2014. Throughout these period, the NBTC and the staff of the Office of NBTC has committed to lay down the foundation of radio frequency allocation and to regulate the businesses operation of Thailand to be on par with civilized countries, as well as

to manage the use of the spectrum which is a national communication resource for public interests to be more efficient and beneficial to the nation and people. Particularly, in the year 2014, there was a number of political changes which put a direct impact on the regulatory direction and promotion of entrepreneurship that need to be done in line with the spirit of the laws and in accordance with the situation of the country in all aspects.

For the organization management, the NBTC focused on the developing Office of the NBTC to become an organization of excellence of regulation in the region by adhering to good governance in the management of human resources, budgeting, finance, asset and supplies, to be most efficient and effective, transparent and accountable. The NBTC also promoted the development of employees' capabilities to be able to support NBTC's mission and use new technologies wisely, meet the public and users' satisfaction and expectation, and establish national standard of good regulation.

The NBTC next year plan in organization development will be focusing on the preparation to support the government's policy on digital economy to ensure that the spectrum management and the regulation of broadcasting and telecommunications businesses will be beneficial to country's sustainable development in both economic and social, education, culture, national security and public interests. This will help enhance potentiality and readiness of the country to become a part of the ASEAN Economic Community in late 2015 as well. The preparation will be done by integrating structure of the Office of NBTC, budget and personnel, including adjusting related rules and regulation to support the Act on Organization to Assign Radio Frequency and to Regulate the Broadcasting, Television and Telecommunications Services B.E.2553 (2010) which is in the process of revision to ensure that the implementation of the NBTC and the Office of NBTC is more efficient. For the role in spectrum management, the NBTC has already set up Radio Frequency Plan for Digital Terrestrial Television Services and Implementation Plan for Mobile Television Transmission System. Besides, the criteria for the spectrum use for disaster prevention and mitigation in case of emergency and





disasters has also been set up as well as the frequency coordination along cross-borders with neighboring countries to prevent and resolve frequency interference in the broadcasting and telecommunications services which may occur in cross-border areas.

In regulating radio broadcasting and television services, apart from the issuance of licenses for 24 national commercial digital television channels which have been launched the digital transmission since 1 April 2014 and having supported Thai people to switch over to the digital terrestrial television broadcast system by providing digital TV coupons to 4.645 million households in 21 provinces for purchasing Set - top Box or using as a discount for purchasing transceiver equipment from companies participating in the project in the first phase, the NBTC has also established the Action Plan which emphasized on regulating to ensure that the radiocommunications station are installed throughout the country in order to provide digital terrestrial television network service, expand viewing coverage area so that the public are able to receive signals from terrestrial television systems equally. The distribution of digital TV coupons will be further accelerated to 141 million households as targeted.

In regulating telecommunications business, after 3G technology has been implemented in 2011, the NBTC has handed over the auctioned money to the government totally 33,444.53 million baht (or 35% of all auction money) and the rest will be delivered in the year 2015. In addition, the International Telecommunication Union (ITU) has published in its 2014 annual report on Measuring Information Society that the implementation of 3G of Thailand has resulted in a growth rate of internet usage which ranked No.1 in the world, and rose up from ranking No.105 in 2012 to No.71 in 2013. Therefore, in setting up the action plan in the year 2015, the NBTC will focus on the 1800 MHz and 900 MHz spectrum auction so that Thailand could develop 4G technology system to support the needs of the public for internet use which is rapidly increased and to support the government's policy on digital economy as well. Also, the NBTC, in operation with related organizations, will accelerate the integration of cable/fiber optic network to succeed as soon as possible.

On behalf of the NBTC, I would like to thank you all the Management and staff of the Office of NBTC who contributed their effort to support the work of NBTC throughout the year 2014 and also thank all stakeholders who provided their good support and cooperation to the NBTC. I am confident that with the power of collaboration and commitment to performing duties at full capacity under the good governance and spirit of law, the broadcasting and telecommunications businesses will be prosper and sustainable exist for the utmost benefit of the public.

Air Chief Marshal

(Thares Punsri)
Chairman of the National Broadcasting and
Telecommunications Commission

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### Message

from the Vice-Chairman of the National Broadcasting and Telecommunications Commission (NBTC) and Chairman of the Broadcasting Commission (BC)

The duty of the NBTC in Radio and television broadcasting in 2014 has continued from the operation in 2013 especially in the broadcasting business license issuance, the switch over to digital system, and the rights of consumers' protection. Despite the challenges of political change which has its impact on the operation in radio and television broadcasting, the NBTC action in such circumstances has

gone well. The progress of its key actions is as follows:

- 1. The Issuance of Radio and Television Broadcasting Business License Under the rule and regulation which is an addition to the Announcement of National Council for Peace and Order (NCPO), the NBTC has reviewed its process of licensing all radio and television broadcasting by accelerating the licensing process of television broadcasting which consists of 6 existing free TV channels, 24 digital TV channels, 500-600 satellite and cable TV channels to be completely broadcasted within a short period of time. For the unauthorized broadcasting services, the NBTC has taken action by issuing licences to radio broadcasting operators for trial operation of approximately 5,000-6,000 stations throughout the country. The action also included the investigation of licensing, having, using, installing radiocommunications stations according to the Radiocommunications Act 1955 where more than 90% of the stations have met the requirement of the technical standards and operated in line with the Announcement of the NCPO.
- 2. The Television Digital Switch Over The switchover from analogue to digital television broadcasting in 2014 has been carried out in an untroubled manner. As a consequence, the NBTC has issued 24 licenses in the category of commercial services to the winner of the spectrum auction for providing digital television services in April 2014 and those licensees have started their trial process and broadcasted since May 2014. In addition, the NBTC has supported the public for the transition to the viewing of digital terrestrial television so that they are able to thoroughly access to the services by distributing each household a 690 baht discount coupon and they can take these coupons to exchange for Set-top Boxes (STB) to convert analog television receiver to digital system.
- 3. Consumer Protection The NBTC has resolved the complaints from consumers successively whether the complaints on false advertising of food and drug, or content which is inappropriate, violent and contrary to good morals and public order of the country. The NBTC also created a complaint process that facilitates the public to easily access, set up an appropriate content regulatory process, as well as made consideration and judgment on a fair and transparent basis.



4. Promotion of Freedom of Communication to establish a proper rule and protect the rights of the people to receive television services, the NBTC has implemented the NBTC's Notification on Criteria for Broadcasting Major Television Program in Public Broadcasting Service 2012 which will enable the public to view the live World Cup without any charge. Eventually, the Supreme Administrative Court has confirmed that such rule is universal, accurate, and considered as the way to protect the rights of citizens.

The year 2014 is the time of transformation and creating challenges of the NBTC. Thus, its operation needs compromise and deliberation in order to support the broadcasting regulation successfully. In the years ahead, the major challenges are likely to be "how to resolve the radio and television for not being used as a tool for political exploitation" and "how to establish a process of digital television switch over that is beneficial to the public as a whole".

In my final note, I would like to thank the Management, staff and employees of the Office of NBTC for their fully contribution in the year 2014. My sincere thanks also go to all parties who took part in the operation of the NBTC and made the operation done successfully with same goal of developing the broadcasting and telecommunications businesses to be more progressive, fair and beneficial to the public in overall.

Colonel

(Natee Sukonrat) Vice-Chairman of NBTC Commission Chairman of Broadcasting Commission

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### Message

from the Vice-Chairman of the National Broadcasting and Telecommunications Commission (NBTC) and Chairman of the Telecommunications Commission (TC)

In the year 2014, the Telecommunications Commission (TC) has regulated and followed up the telecommunications business operation on international mobile telecommunications in frequency range of 2.1 GHz (3G) to be complied with the licensing conditions and the operation has been successful. That is, after the implementation of 3G services on the 2.1 GHz frequency band in Thailand, the rate of 3G

service usage through mobile phones has increased and it resulted in the increase of mobile internet usage and it is consistent with the Annual Report of Indicators for Measuring the Information Society 2014 of the International Telecommunication Union (ITU) which indicated that Thailand's growth rate of Internet use is 1 of 10 of world's ranking and it made Thailand's growth rate of Internet use ranked 1<sup>st</sup> position of the world by moving up from 105<sup>th</sup> in the year 2012 to 71<sup>st</sup> position. It also improved the ICT development of Thailand which can be seen from the position of ICT Development Index (IDI) of Thailand that moved up from 91<sup>st</sup> to 81<sup>st</sup> in 2013 among 166 countries around the world and it ranked in top level of the Asia-Pacific countries. These growth rates demonstrated the Thailand's potential in communications which has been rapidly developed and there are opportunities to develop progressively in the future.

In this year, the TC has done several major operations which included the preparation of the 1800 MHz and 900 MHz Spectrum Auction for the development of 4G system to support the needs of internet use of the public. In consumer protection, the TC has encouraged service users to protect their rights, keep their own mobile phone number, and save their money by having mobile phone SIM registered to verify the ownership of pre-paid mobile phone number through "2 Shots (2 Shae)" application. The mobile phone SIM registration also helps facilitate the users to refund their money after the termination of service, and reduce the problem of SIM card misuse in crime. In addition, the NBTC has resolved the SMS Spam problem for consumers by establishing a channel for SMS service cancellation or \*137 where the users in all mobile network could press \*137 without any charge. For data roaming problem-resolving, the NBTC has made campaigns to raise users' awareness of their rights to terminate international data roaming at anytime by establishing new channel of service termination or \*106# which is also free of charge. The operation of the TC also included resolving complaints of mobile phone service users who were charged for buying online games items via mobile phone, and knowledge building on communications in disaster situations and emergencies, etc.

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In 2015, the TC will speed up its operation to accomplish their major plans, such as the spectrum auctions for 1800 MHz and 900 MHz frequency bands, so that the 3G services could be developed to 4G services. It is also considered as the establishment of national vital infrastructure, the support of government's Digital Economy policy to provide mobile networks and mobile Internet for the public access throughout the country, development for other benefits, such as education system, human resources development, where knowledge sharing and transfer are encouraged to help increase competition's potential and capability of the country. This includes the integration of the cable network, in cooperation with the relevant authorities, so that they are able to expand their networks as scheduled, the preparation of number auction to raise money for state's revenue, as well as the campaign on prepaid mobile phones registration so that the users can verify their ownership of the numbers, the registration for self-identification to access public WiFi internet, the continuation of consumer protection implementation to resolve the problem arising from the provision of telecommunications services and prevent the users from being exploited, the feasibility study of using mobile phone technology for hazard alert, and so on.

On behalf of the TC, I wish to thank all parties who provided their great contribution to the development of telecommunication business of Thailand and make the TC's operation done successfully. I reaffirm that the TC will be concentrated in our duties and action with integrity in order to develop and regulate telecommunications services so that the telecommunications infrastructure will be expanded in all areas of the country, and Thai people are able to equally access information and knowledge body. This will help developing national economic and society including the telecommunications industry consecutively with a view of consumer protection in telecommunications, and providing opportunities to all parties to participate in the development of telecommunications services to be on par with international countries in the future.

Colonel

(Settapong Malisuwan)
Vice-Chairman of NBTC Commission
Chairman of Telecommunications Commission





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Air Chief Marshal Thares Punsri Chairman of NBTC



Colonel Dr. Natee Sukonrat Vice-Chairman of NBTC Chairman of Broadcasting Commission



Colonel Dr. Settapong Malisuwan Vice-Chairman of NBTC Chairman of Telecommunications Commission



Lt. Gen. Dr. Perapong Manakit NBTC Commissioner Broadcasting Commissioner



Dr. Suthiphon Thaveechaiyagarn NBTC Commissioner Telecommunications Commissioner Being in position of Commissioner during 7 October 2011 - 8 September 2014



Summary



Pol. Col. Taweesak Ngamsanga NBTC Commissioner Broadcasting Commissioner



Assoc. Prof. Prasert Silphiphat NBTC Commissioner Telecommunications Commissioner



Asst. Prof. Dr. Thawatchai Jittrapanun NBTC Commissioner Broadcasting Commissioner



Ms. Supinya Klangnarong
NBTC Commissioner
Broadcasting Commissioner



Mr. Prawit Leesatapornwongsa NBTC Commissioner Telecommunications Commissioner



General Sukit Khamasunthorn

NBTC Commissioner

Telecommunications Commissioner

This Executive Summary presents the conclusion of the annual performance in spectrum management, and the regulation on broadcasting and telecommunications services as follows:

# Major Performance on Spectrum Management

The NBTC has carried out the spectrum management which is considered the scarce resources for the utmost benefit to the nation and the general public whether the preparation of radio frequency plans, such as radio frequency plan in E-band, radio frequency plan in Trunked 800, etc., in order to resolve the problem of illegal use of radio frequency of the unauthorized radio stations and radio frequency interference which has continuously been occurred and endless, the issuance of criteria regarding spectrum refarming for the efficient usage, and the formulation of the initial plan of mobile television broadcasting system under the technical cooperation with the International Telecommunication Union (ITU) including the organization of meetings with telecommunications operators, television operators for the provision of digital television services, and television operators for the provision of digital television network services, in order to hear out the information being used for the preparation of the initial plan for mobile television broadcasting, the formulation of radio frequency plans for digital terrestrial television broadcasting services, the preparation of the initial plan for mobile television broadcasting, in order to enhance the potentials of spectrum management. Moreover, the NBTC has conducted the radio frequency coordination with neighboring countries, such as Laos, Myanmar, Cambodia and Malaysia, to reduce the problem of frequency interference in all services which may be occurred in the bordering areas. In 2014, the Office of NBTC had made objection on satellite network which may have affected on the interference of the satellite network of Thailand periodically for totally 99 issues. The action was also under the Radio Regulation of the International Telecommunication Union.

The NBTC had assigned spectrum to be used for radiocommunications services which consisted of new spectrum allocation and spectrum refarming for the state-enterprises, social organizations, and private sector, in order to support and promote the special telecommunications services of Thailand. In 2014, the NBTC had allocated totally 2,112 frequencies, issued 188,521 radiocommunications licenses, and issued 5,063 certificates of the radiocommunications officers.

Also, the NBTC has followed-up and monitored the use of spectrum in broadcasting and telecommunications services in order to ensure of the spectrum utilization and the utmost benefit, without frequency interference, and to control the use of spectrum to be in line with the criteria, rules and conditions. The activities are included the verification of radio frequency possession, monitoring of radio frequency transmission standard, radio frequency interference resolution, and verification of unauthorized frequency.





# Major Performance in Regulating Broadcasting and Television Services

The performance of the NBTC by the Broadcasting Commission (BC) in 2014 has still been continued on the operation from the year 2013 in order to establishing the procedures of licensing, regulating, developing, promoting rights and freedom, protecting consumers, and the transition to digital broadcasting and television services under the strategies set out in the Broadcasting Master Plan No.1 (2012-2016). the main activities in 2014 are as follows:

#### 2.1 Broadcasting and Television Business Licensing

Under the additional rules and regulations according to the Announcement of the National Council for Peace and Order, the NBTC has started the reviewing of licensing process of the radio and television broadcasting services. The process has been carried out in a step by step and gradually granted licenses for television stations which consisted of 6 free traditional TV channels, 24 digital TV channels, and 500-600 channels of satellite TV and cable TV, to be able to broadcast within a short period of time. For the resolution of the unauthorized broadcasting service problems, the NBTC has issued licenses to the radio broadcasting operators for trial operation for 5000-6000 stations across the country. All stations must be investigated of the licensing, having, using, installing the radiocommunications stations under the Radiocommunications Act B.E.2498 (1955). There are more than 90 percent of radio stations which passed the technical standards and complied with the Announcement of the National Council for Peace and Order.

#### 2.2 The regulation of broadcasting and television services

Such as the regulation of TV programming and content, by having issued the NBTC Notification on Criteria for TV Programming for Broadcasting or Television Services No.2 B.E.2557 (2014) for revising the NBTC Notification on Criteria for TV Programming for Broadcasting or Television Services B.E.2556 (2013) to be in accordance with the form of subscription services provided by the licensees of non-spectrum used broadcasting or television services. This included the formulation of the (draft) NBTC Notification on Criteria for TV Programming for Broadcasting or Television Services No.3 B.E. .... to improve the storage period of program recording of broadcasting or television licensees under Section 38 of the Broadcasting Business Act B.E.2551 (1998) for more appropriateness and efficiency of the regulation of broadcasting and television services. In addition, the NBTC has regulated program content according to the Announcement of the National Council for Peace and Order No. 97/2014 regarding



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the Cooperation on the Operation of the National Council for Peace and Order and the Dissemination of Information to the Public, and the Announcement of the National Council for Peace and Order No. 103/2014 on Additional Amendment of the Announcement of the National Council for Peace and Order No. 97/2014 by monitoring contents which may be at risk in the channels presenting political contents, and having invites operators to clarify the facts concerning the broadcast of contents which may be contrary to the Announcement of the National Council for Peace and Order, and Section 37 of the Broadcasting Business Act B.E.2551 (1998) as well. The NBTC also emphasized on its mission to promote and regulate the competition, self-regulation, by having exchanged knowledge and established a network for promoting self-regulation, organizing meetings for setting practices and mechanisms for supporting self-regulation of media. Moreover, the NBTC has encouraged the operators to set up the system for supporting the broadcasting and television operation efficiently in case of emergencies or disasters, as well as the regulation on service rates in broadcasting and television services to be fair for the public benefit.

### 2.3 Transition to digital television and supporting the public in the digital terrestrial television switch over

The NBTC has carefully planned its policies and framework of the implementation period of the transition to digital television. Also, the radio frequency plan for digital terrestrial television and the initial plan for mobile television broadcasting have been set up so that the public will get a minimum impact of the transition period, and to ensure that the major change of the national television service has been smoothly carried out and successful as planned, which will lead to the development of television business of the country and the ability of the citizen to communicate and access a variety of information equally and more knowingly.

(1) Having implemented the project for supporting the public in the digital terrestrial television switch over by distributing the 690 baht digital TV coupon for supporting the public to receive the digital terrestrial television service with an effectiveness and efficiency, and tangible achievement, and supporting the digital terrestrial television switch over as well. In 2014, the coupons were distributed to 7,046,391 households.



(2) Setting up the System for Monitoring Digital TV Service Areas in order to provide knowledge and information on the provision of digital terrestrial television network service in 39 main stations throughout the country, including the provision of information on Digital TV Service Area. The system will be used via web browser or portable communication devices, tablets, smart phones both in Android and iOS operating system.

(3) Moreover, the NBTC has carried out the licensing to use spectrum for the provision of digital television services in category of public service, type 3, for distributing information, enhancing a better understanding between the government and the general public, and the Parliament and the general public, as well as setting up plans for the installation of radiocommunications stations in order to provide digital terrestrial television network service, following-up the implementation of network expansion of digital terrestrial television, monitoring and measuring signal strength of digital terrestrial television stations, and inspecting technical parameters of digital terrestrial television signals for regulating the operation as well.

#### 2.4 Promotion of rights and liberty to communicate

To create the right rules and protect the rights of citizens in television services, the NBTC has followed the NBTC Notification on Criteria for Major TV Programs which can be broadcasted only in the Public Television Services B.E.2555 (2012), and that will enable the public to view the live World Cup without any charge. Finally, the Supreme Administrative Court has confirmed that such rules and regulation are right and universal, as well as protecting the rights of citizens. The year 2014 is regarded as a period of change and challenges for the implementation of the NBTC. Thus, the operation needed compromise and deliberateness so that the regulation in broadcasting and television goes smoothly. For the coming years, the major challenges are on 2 main issues; resolving the radio and television problems so that it will not be taken as a tool for political advantage, and the way to set up the transition procedure to digital television for the utmost benefit of the public as a whole.





#### Major Performance in Regulating **Telecommunications Services**

The performance of the NBTC by the Telecommunications Commission (TC) in 2014 has been focused on promoting and developing the quality of lives of the citizens including having carried out the mission on encouraging people throughout the country to be able to access to information in order to reduce the social inequality, as well as preparing the readiness and developing capability of human resources to support the entering to ASEAN Economic Community in 2015.

The Telecommunications Commission has implemented important activities under the Strategies of Telecommunications Master Plan No.1 (2012 - 2016) which consisted of providing universal basic telecommunications service, developing and promoting free and fair competition, spectrum licensing and telecommunications business licensing. From the year 2005 – 2014, the number of operators and licenses of internet service provision has increased constantly due to the fair competition in the market and the reduction of barriers to entry to the market. At the end of 2014 the number of operators in telecommunications market are 362 operators, and the important missions in this year are as follows:

- (1) The preparation of spectrum auction in the frequency bands of 900 MHz and **1800 MHz** to accommodate the growth of technology usage both through wired and wireless. In 2014, the NBTC has prepared for the spectrum auction in the frequency bands of 1800 MHz and 900 MHz which are the spectrum under the concession of CAT Telecom Public Company Limited and TOT Public Company Limited to support the development of 4G LTE system of Thailand as well as to accommodate the rapid growth of internet usage of the citizen. The spectrum auction will also be a part of all drivers to force Thailand into the digital economy strongly and securely.
- (2) Efficient Utilization of Telecommunication Resources by having carried out the projects for developing a system of identity registration for WiFi internet access. The principle of the system will be a one-time registration for the identification for WiFi internet access anywhere across the country which will help identify and authenticate the users, support the stability and security of Thai society, reduce the arrogation of personal information to access the internet for improper use or crime use. This includes encouraging service users to





protect their rights and maintain their mobile phone numbers by stimulating the registration of SIM cards of prepaid mobile phone service users via the "2 Shots (Song-Shae)" application in order to verify the numbers' ownership, protect the rights of users, and get the money refunded when terminating the service. In 2014, the number of SIM cards registration, from 27 June to December 2014, is totally 1,192,224 numbers.

- (3) Having organized the auction for pretty numbers of mobile phone numbers by preparing the pretty numbers of more than 100,000 numbers, which popularly arranged in the forms of the 5-digit identical number (089-12x-xxxx) and 6-digit identical number (081-2xx-xxxx) that have been sold at a very high price in the market whether in mobile vendors' shops or on-line shops, for the numbers auction. All money received from the auction will be delivered for state revenue so that the government can use for further developing countries.
- (4) Having carried out activities for encouraging those who are hearing impaired and speech impaired to be able to access information through the Thailand Telecommunication Relay Service (TTRS). The Office of NBTC, in cooperation with the Foundation for the Disabled, has generated the opportunities for enabling the hearing impaired to access information universally and equally by providing financial support the development of TTRS facilities and functioning applications under the USO Plan (2012-2016). The TTRS have been installed in 27 branches of Big C Supercenter throughout the country. The emergency medical system is also developed for receiving notification through 1669 in order to link with the working system of TTRS, as well as trainings on ITEMS programs of the emergency medical system were organized.







#### **Consumer Protection**

The NBTC has convinced of the importance of consumers protection and given the first priority of its tasks in protecting consumers in the broadcasting, television and telecommunications services, especially the consumers awareness raising of their rights and benefits as consumers so that they can protect themselves for not being exploited by operators. The activities include raising awareness on cyber security, building knowledge and understanding of the public on telecommunications and communication and the prevention and mitigation in cases of disasters and emergencies, including the establishment of the center for monitoring illegal content advertising on radio and TV to reform the consumer protection, prosecute the offender, and to protect consumers from being victim of inquality products or services, as well as establishing and strengthening the consumers' network by supporting the organization of forums for exchanging ideas and opinions and building network for driving public policies. In 2014, the major missions of the NBTC are such as the consumer protection for temporary period in case of termination of concession for the provision of mobile phone service in the frequency band of 1800 MHz, the issuance of the NBTC Notification on Consumer Protection for Temporary Period in case of Termination of Concession, to ensure the consumers of the continuation of mobile phones services usage, and the resolution for internet leakage problems when the users travelling abroad, etc.

#### Efficiency and effectiveness of consumers' complaints consideration

(1) In 2014, the NBTC had carried out activities under the provisions of the relevant NBTC Notifications comprising the NBTC Notification on Procedure and Timeline for the Consideration of Requests or Complaints in Broadcasting and Television Services B.E.2555 (2012), the NBTC Notification on the Action which may Exploit the Consumers in Broadcasting and Television Services B.E.2555 (2012), and the Notification of the Office of NBTC on Guideline for Consideration of the Action which may Exploit the Consumers under Item 5 (10) of the NBTC Notification on the Action which may Exploit the Consumers in Broadcasting and Television Services B.E.2555 (2012). Having considered the efficiency and effectiveness of the consideration on consumers' complaints in broadcasting and television services, it is found that the number of complaints and suggestions which was resolved/completed is 90.32 percent. In the year 2014, there were totally 124 complaints or accounted for which the Office of the NBTC was able to resolve for 112 complaints or accounted for



90.32 percent of all complaints, and other 12 complaints have been in process of consideration. Some examples of the complaints are in the case of being unable to watch the World Cup for completely 64 matches, Set-top Box, the provision of channels services by using foreign satellite, etc.

Having considered the complaints and suggestions relating to program schedule and content according to the Broadcasting Business Act B.E.2551 (1998) Section 37 as the program containing content which are in the scope of Section 37 is considered the "forbidden" content that must not be broadcasted, and the relevant NBTC Notifications consisted of the NBTC Notification on Criteria for the Programming of Radio Broadcasting or Television Services B.E.2556 (2013) (and No.2), the Office of NBTC Notification on Guidelines for Determining the Appropriateness Level of TV Programs under the NBTC Notification on Criteria for the Programming of Radio Broadcasting or Television Services B.E.2556 (2013), the NBTC Notification on Procedure and Timeline for the Consideration of Requests or Complaints in Broadcasting and Television Services B.E.2555 (2012), the NBTC Notification on Criteria and Methods for Gathering Facts concerning the Offense in the Broadcasting and Television Services which will be accused as Administrative Penalty B.E.2556 (2013), as well as other related laws such as child protection, alcohol, gambling, etc. Some examples of complaints on program schedule and content are in the case that some TV channels have presented movies containing the contents that have a serious impact on mental deterioration of the citizen, the presentation of program content that have an impact on public order or good morality of the citizen, and the case of presenting program content that are forbidden under Section 37 of the Broadcasting Business Act B.E. 2551 (1998) and without taking precautions for inspection or suspension of the broadcasts, and so on. At the end of 2014, the number of complaints and suggestions which could be resolved/completed within the given period was 43 complaints or accounted for 97.73 percent of the total complaints (44 complaints), and there was only one complaint and suggestion that has been in process of consideration.

(2) In 2014, the NBTC had assigned the Office of NBTC to resolve the complaints in telecommunications services for totally 2,210 complaints, of which 1,658 complaints were resolved, or accounted for 75.02 percent of total complaints, and 552 complaints have been in process of consideration or accounted for 24.98 percent of total complaints. Moreover, the Office of NBTC has conducted the mediation under the NBTC Regulation on the Mediation between Telecommunications Business Licensees and the Complainants B.E.2555 (2012), by focusing on facilitation of mediation service as requested by the complainant, promoting and disseminating the alternative methods of dispute resolution, mediation in particular, setting up mediation directory and rhetoric, preparing and reporting information and statistics on the mediation provision, as well as evaluating the mediation and proposed to the TC







and the NBTC for acknowledgement monthly, preparing the registration list of mediators and coordinating with the mediators, coordinating with other organizations concerning the alternative dispute resolution process, organizing mediation as requested by the complainant. From 1 January to 31 December 2014, there were 276 complaints that the parties requested for entering the mediation process.

(3) For the follow-up and monitoring the quality of international mobile telecommunications service in the frequency band of 2.1 GHz, the NBTC had monitored the service provision of AWN, RF and DTN during January – October 2014 in areas of Bangkok in 2 parts; 1) voice call test, which found that AWN, RF and DTN have a success call rate at 100 percent which met the requirement of the Notification on Quality of Service prescribing that a success call must be not less than 90 percent, 2) FTP Download, which found that AWN, RF and DTN have their average FTP download throughput of more than 345 kbps which met the requirement of the Notification on Quality of Telecommunications Service (Data) for Mobile Phone Network B.E.2555 (2012).







# The "Broadcasting and Telecommunications Research and Development Fund for the Public Interest"

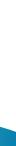
In 2014, the NBTC has provided financial support to the Fund as follows:

The projects proposed upon the requests of individuals for financial support (Project Type 1) under the overall budget framework of 500 million baht. The objectives of the projects were to provide opportunities for the public and interested parties to submit the project proposals, which must be in line with the objectives of the Fund and beneficial to the general public in overall, for the Fund's financial allocation according to the NBTC Resolution in the Meeting No.3/2014 on 19 March 2014. Each project proposal requesting for financial support which submitted by any interested organizations and individuals shall not be exceed 10 million baht, and the implementation time frame of the project must not exceed 2 years. In the year 2014, there were totally 268 projects applying for the fund allocation for a total amount of 1,893.42 million baht which must be considered by the Sub-committee for scrutinizing projects and expenditure budget of the Fund. The Projects Type 2 which were approved for financial support at the amount of 17,603.11 million baht for facilitating the general public to receive the useful services under the policy framework are as follows:

(1) The 15 projects and 1 task under USO Plan in 2014 at the amount of 1,432.25 million baht which are implemented under the Plan for the Provision of Universal Basic Telecommunications Services and Social Services (2012-2016) of the Telecommunications Commission (TC). However, the implementation of these projects has been postponed due to the policy of the National Council for Peace and Order and the NBTC Resolution in the Meeting No.6/2014 on 25 June 2014.

(2) The project to support the citizen in the transition to digital television switch over under the budget framework of 15,801.00 million baht for supporting the distribution of discount coupons to 22.9 million households for the purchasing of the digital terrestrial television receivers. The operation has been done under the Order of National Council for Peace and Order No.521 dated 29 August 2014. The coupons were distributed for 14.72 million coupons in 45 provinces across the country, however, the Office of NBTC is going to distribute more coupons in the areas with digital television signals to be covered for not less than 80 percent of the areas.









# Competition and Trends on Broadcasting and Television Industry in 2015

In 2014, the NBTC had assigned the Office of NBTC to develop, promote and regulate free and fair competition in the broadcasting, television and telecommunications services. Having considered the competition environment in the television services, it is seen that the industrial structure of television services of Thailand in 2014 has been transformed to the digital television transmission (Digital TV) since 1 April 2014. At present, there are 27 channels which have already broadcasted in Digital TV, of which 6 channels have switched over from the analog system and broadcasted in parallel in both digital TV and analog TV (Traditional TV), 3 channels have broadcasted in the channel for public service, and there are other 21 new channels. According to Nielsen data, it is found that, in overall of the year 2014, the average TV viewing of Thai people is 247 minutes per day, increasing 3 percent from the previous year which can be divided to the viewing of the traditional TV channels in an average of 177 minutes per day, the new digital TV channels in an average of 40 minutes per day, and the Cable TV and Satellite TV in an average of 117 minutes per day. For the advertising value of the television services on traditional TV channels, digital TV channels, and cable TV and satellite TV, in 2014, the proportion of advertising value was 50.2 percent, 9.5 percent and 5.7 percent of total advertising value in all media, respectively. The switch over to the digital transmission in this year has resulted in the growth of all sectors in television industry, especially the advertising value which is obviously increased and a variety of channels for information access of the people throughout the country. For the radio broadcasting services, reference is made to Nielsen data which is found that the number of radio stations in the main FM system is currently 40 stations (87.5 MHz - 107.0 MHz) available areas of Bangkok and its vicinities in which the advertising value is 4.4 percent of total advertising value in all media.

For the trend on the viewing of terrestrial television services in 2015, it is expected that the viewing on traditional TV (6 channels) is likely to gradually decrease continuously due to the viewers will turn to new digital TV channels in 2014, which is possible that the reason are from the coverage of digital television signal transmission in the provincial areas according to the plan for network expansion including the increase of digital TV coupons





distribution under the project to support the citizen in the transition to digital terrestrial TV switch over. For those who already received the coupons but have not yet sure of the redeeming process and quality of the Set-top Box, or have not yet seen the necessity of the transition to digital system, or have still been in the process of decision-making before the expiry date of the first lot of coupons in May 2015, including the distribution of coupons in another phase, which help increased the installation of Set-top Box and the viewing of iDTV receiver especially in areas where TV antennas have been already used for viewing TV programs in analog systems (26.6 percent of all households throughout the country).

Moreover, the annual programming reshuffle of TV channels that major producers or content providers already programmed in the existing analog channels have moved their programs into new digital TV channels, especially if the popular TV programs are withdrawn such as game show, soap operas, or the programs relating to contest and competition, it would have the impact on the reduction of popularity of the viewers on the original channels and increase the popularity of the new channels instead. However, the change occurred has shown the factors for maintaining the viewers base, or increasing the viewers base which are the quality of program content, types of program, and program production whether it will be able to respond to the public in wide area or not. This includes the publicity and marketing of each program or channel.

In addition, when considering the behavior of media consumption of people that have changed, it is found that it can affect the way of viewing television or listening to radio, such as watching online television or retroactive viewing through internet or mobile application including listening to radio through computer with internet connected. It may results in the change of ratio of investment in media advertising as well. The radio media is likely to decline in 2015 while the television business which the digital TV channels are currently growing, if the installation of the Set-top Box and the viewing via the iDTV receivers as well as the popularity of viewing program content in digital TV channels continues to increase steadily, it may increase the proportion of advertising value of television from advertising value in all media in 2015.





# Competition and Trend on Telecommunications Industry in 2015

For the competition environment in telecommunication services, the Herfindahl - Hirschman Index (HHI) has been used for measuring the competition level in the market or industry and the HHI across the country in the year 2014 is 4,627 without new comer in the market. It is shown that the concentration of the provision of fixed-line services in the market is relatively high and belongs to the incumbent. The main reasons are because of the business nature of the provision of fixed-line service which requires high amount of investment and it thus results in a natural monopoly of the incumbent. The reasons also included the competitive restrictions under contract condition of new service providers which results in the commercial analysis for the investment in fixed-line business of the unworthy investment in the full saturation situation of the market. Besides, the other reasons are because of a saturated situation of the market and the changing behavior of users that accepted the substituted technologies service in order to achieve communication objectives for reasons of convenience and lower service charge rates.

From the supporting factors on both supply and demand and the advancement of telecommunications technology has affected in the growth of the telecommunications market in a steady rate of increase. It is expected that by the year 2015 the growth rate will be rose not less than 7 percent from the previous year or accounted for telecommunications market value at approximately 0.55 trillion baht. The market of telecommunications services is still the major market of the overall value of communications market and telecommunications service which is the key driving factor come from the demand for telecommunication services usage in type of data services, which is currently gaining more popularity in the use steadily. Whether the provision of non-voice services through fixed data network or provision of non-voice services through mobile data network, it could be predicted there will be an expenditure in the market of non-voice telecommunication services of at least not less than 14.5 percent whether the spectrum auction in the frequency bands of 900 MHz and 1800 MHz will be held in this year or not with the reasons of direct stimulating the demand side of the use or the result of stimulation on a variety forms of sale promotion of mobile phone service providers. Moreover, the service providers are trying to compensate their revenue per unit (ARPU)



arising from the provision of voice services which is likely to decline constantly by accelerating the expansion of network to increase the provision of broadband internet services. These are all good signs that encouraged the growth steadily.

Nonetheless, a transaction or trade in the online world has become more popular and widespread. In 2015, social commerce will become one of the main channels of trading through online society. It will be a phenomenon that create value-added of the products and services in various forms, whether in form of the display of goods and services access, online publicity, being a centered channel of payment, etc. All of these transactions will enable developers to create and design new applications in order to support the needs of consumers and service providers. Moreover, it will encourage a number of new service providers in the online world and they will jointly offer more goods and services into the social business market.

The number of access rate of internet service has increased in each year and the expansion of telecommunications network to cover all areas and service users in Thailand. Therefore, the people life style nowadays is inevitable depended on communication channels via internet or it could be said that "internet is everything (Internet of Things – IoT)". The popularity of the facilities equipment which is well-known in the Smart Gadgets or Wearable Devices included electronics devices with sensors, etc. It is also predicted that by the year 2015, the users' behavior will always use their facility equipment via internet access, at any time, any place and will get more popular in the major urban areas of the country. However, in the past two years, the domestic users have faced the obstacles and resistance for the use of cloud services such as the acceptance of security to use the services, etc., but in 2015 the cloud service providers in the world class will build more trust for service providers and users in the country more clearly. This will help ensure the organizations in Thailand of more confidence in the cloud services and reduce the concerns in safety, quality of services, and starting to subscribe private cloud service, as well as the use of hybrid cloud service and the cloud orchestration eventually.





# 8

#### Budget management of the Office of NBTC

For the budget management of the Office of NBTC, as of 31 December 2014, the financial status of the Office of NBTC consisted of assets for totally 12,423,318,927.91 baht, total revenue of 19,866,734,422.22 baht, and operational expenditure of 14,205,972,985.73 baht. However, the financial statement of the Office of NBTC has not yet been certified by the Office of the Auditor General of Thailand.

The Internal Audit Committee, who operates its powers and duties under Section 3 of the NBTC Regulation regarding the Internal Audit B.E.2554 (2011) with its independence in carrying out the duties without intervention from the NBTC, the Office of NBTC and other departments, has its opinion that the operation of the Office of NBTC in the year 2014 was done with a good corporate governance, transparency, adequate risk management and internal controls. The Internal Audit Committee has not found any defects or significant irregularities. In addition, the preparation of financial reports has been complied with the generally accepted accounting standards and is appropriate, reliable, and having disclosed adequate information on financial reports.

For the budget plan of the Office of NBTC at the amount of 5,622.70 million baht and the expenditure result is totally 4,601.83 million baht when compared to the expenditure result in the year 2013, the total expenditure is 3,794.80 million baht. In 2014, the Office of NBTC had carried out activities under the work plan, projects, and budget plan in 2014 in accordance with the 3 Master Plans and the Strategic Plan of the Office of NBTC and it received the successful outcome of the implementation of 88 projects under the regulation in broadcasting, television and telecommunications services, and regional and integration services. However, the 70 projects of those projects have been committed for budget, while other 18 projects are new projects.

Unit : million baht

Details	Budget allocated	Expenditure	Percentage	Balance	Percentage
Fixed budget (expense for the NBTC and the Office of NBTC operation	3,807.92	3,020.88	79.33	787.04	20.67
2. Budget for Investment (projects)	1,734.78	1,520.95	87.67	213.83	12.33
3. Contribution to the Fund	50.00	50.00	100.00	-	-
4. Budget reserved for emergencies and contingencies	30.00	10.00	33.33	20.00	66.67
Total	5,622.70	4,601.83	81.84	1,020.87	18.16

Source: Strategic and Budget Bureau, the Office of NBTC





