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## THE ROLE OF STAKEHOLDERS ON IMPLEMENTING UNIVERSAL SERVICES IN VIETNAM

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### ABSTRACT

This paper examines the role of stakeholders on implementing the universal services policy in Vietnam (interval 2005-2010) in order to clarify their impact and their position on performing the policy. The stakeholder theory is employed to identify and categorize the stakeholders. The authors are to look at the role of the stakeholders such as the national government, international organizations, policy intermediaries, companies, and customers/citizens via applying the qualitative method to gather data and analyse the secondary document. The qualitative approach of interviews on some officers who participated in building up and operating the policy was also conducted. The results demonstrate that stakeholders have a huge impact on the success of the universal service policy.

**Keywords:** universal services, stakeholders, role.

### 1. INTRODUCTION

Today information and communications technology (ICT) in general and telecommunications realm in particular play an increasingly vital role on social and economic development of each country. Promoting the application of advances of ICT to build the Information Society as well as to achieve the Millennium Development Goals is one of the critical missions that the International Telecommunication Union suggested nations to carry out (WSIS, 2003).

In the past years, there has been a profound research on universal telecommunication services, especially concentrating on study of the role government/policy (Samarajiva, R., 2000; Lee et al 2003; Gillett et al, 2004; Lee et al 2004; Frieden, R 2005; Gillwald, 2005; Fan, 2005; Picot & Wernick, 2007; Kalra & Borgohain, 2004; Hammond IV, 2004; Falch, 2007) or the models/tools furthering the penetration of universal services (Peha, 1999; Falch & Anyimadu2003; Falch & Henten, 2010). However, there have been few studies on the role of stakeholders with regard to implementing universal services (Choudrie et al, 2003).

This paper will examine the role of stakeholders on carrying out universal services policy in order to clarify

their impact and their position on performing the policy with Vietnam (interval 2005-2010) as a case study.

The paper attempts to answer the following questions:

1. Who were the stakeholders?
2. How did they carry out the first universal telecommunication services program (2005-2010) and what affect did they have on formulating and implementing the program (positive and negative pattern)?
3. Which implications will be recommended to the government?

The paper will employ the stakeholder theory to recognise and categorize stakeholders in telecommunication sector in Vietnam who took part in deploying universality of telecommunication services. Based on qualitative methods, the authors are to analyse the secondary documents of Vietnamese government and conduct interview directing on some officers working for Ministry of Information and Communications and Vietnam Public Utility Telecommunication Service Fund.

The paper is structured as follows: Section 2 presents research methods and data collection, section 3 highlights the periods of universality of telecommunication services; section 4 discusses the findings; and finally section 5 provides conclusions, some recommendations are as well be given.

### 2. RESEARCH METHODS

To explore the role of stakeholders on deploying the universal services policy in Vietnam within period 2005 - 2010, pointing out who were the stakeholders is imperative. According to Freeman (1984), stakeholder is "any group or individual who can affect or is affected by the achievement of the organization's objectives". By using the theory, Papazafeiropoulou et al (2000) built up a framework of five groups of stakeholders in the electronic commerce market, including:

- The national government
- International organizations
- Policy intermediaries

- Companies and
- Customers/citizens.

They concluded that identification and involvement of the widest players in the market might reduce conflict and increase the rate of success in information system implementation. This framework is applied to identify stakeholders in carrying out universal services in Vietnam.

In order to clarify the stakeholders' impact and position on performing the policy, the qualitative methods were employed to analyse the secondary documents. Almost all data were mainly collected from Vietnamese Ministry of Information and Communications (MIC), the Vietnam Public Utility Telecommunication Service Fund (VTF), and some incumbent providers. However, some data was also gathered from speciality newspapers.

To reinforce the result of analysis the secondary sources, the qualitative approach of interviews was conducted on some officers who took part in building up and carrying out the universal service policy (period 2005 - 2010) in which one officer from MIC who is a former director of VTF, two officers from VTF. These interviews were carried out via telephone or email. Prior to these interviews, questionnaires were delivered to these interviewees and all of the interviews were retained or made note in order to ensure validity of the data collected.

Because the definition of universal services is very distinct across countries. It is likely that each country has created a definition that is in line with their social, economic and technological development. Hence, in this paper, the term of universal services is to base on the Vietnamese government's definition/perspective in each interval. Specifically, before 2005 universal services were regarded as emergency calls and basic telephone/post services provided to rural and remote areas (including tele-centres). Then, in 2006 the term of universal services was named public telecommunication services included: universal telecommunication services and mandatory telecommunication services in which the universal telecommunication services were standard telephone services and standard Internet access services; the

mandatory services were emergency calls. The targeted subjects were individuals and households living in communes having the tele-density under 2.5 lines per 100 inhabitants (Decision 74, 2006).

Although universality of telecommunication services has been carried out a long time ago, however since 2005 Vietnam has initially addressed on policy of universal services. Moreover, the years from 2011 to now the Program on the provision of public telecommunications services toward 2020 has been being built up, the implementation of universal services has been delayed and restricted, hence the paper is to look at the role of stakeholders in two periods: the years up to 2005 and the period 2005 - 2010, especially in the second interval.

### **3. PERIODS OF UNIVERSALITY OF TELECOMMUNICATION SERVICES IN VIETNAM**

#### **3.1. Overview of telecommunications market**

Similar to other developing countries, Vietnam has reformed and liberalized its telecommunications market since 1994 (Dung, 2012) as it separated the regulatory and business function from the Department General of Post and Telecommunication - DGPT (a government organization, predecessor of MIC today). Consequently, DGPT was only responsible for making telecommunication and post policy and regulation, and Vietnam Posts and Telecommunications Corporation (VNPT), a state-owned-company was in charge of business in telecommunication and post field (previously VNPT's business activities had run follow the direction of DGPT). In 1995 the nation government ended the monopoly on provision of telecommunication services of VNPT as it granted licenses to two new entrants (Viettel and Saigon Posts And Telecommunications Service Joint-Stock Corporation - SPT). It as well issued the strategy for telecom and post development period 1996-2000 in 1997.

The development demand of the telecommunications market in Vietnam in period 1996 - 2020 is illustrated via some objectives stated in the periodic national development strategies as follows:

**Table 1: Some key ICT indicators**

<b>Indicators</b>	<b>1996-2000</b>	<b>2001-2010</b>	<b>2011-2020</b>
Percentage of fixed line subscribers	5	16	25
Percentage of mobile phone subscribers	-	26	140*
Percentage of internet subscribers	-	12	20 (fixed broadband internet) 40 (mobile broadband internet)
Percentage of households having fixed line	-	-	45
Percentage of households access internet	-	-	40
Percentage of communes having fixed line	almost	100	100
Percentage of communes access internet	-	-	100

\*: The target till 2015

-: no data

Source: MIC (Decision 110<sup>1</sup>, Decision 158<sup>2</sup> and Decision 32<sup>3</sup>)

<sup>1</sup> Decision no 110 issued on February 22<sup>nd</sup> 1997 by the Prime Minister approving the national development strategy on Posts and Telecom period 1996-2000.

<sup>2</sup> Decision no 158 issued on October 18<sup>th</sup> 2001 by the Prime Minister approving the national development strategy on Posts and Telecommunication to 2010 and orientation to 2020.

<sup>3</sup> Decision no 32 issued on July 27<sup>th</sup> 2012 by the Prime Minister approving the national telecommunication development strategy to 2020.

The figures in the Table 1 show the ambitious telecommunication development demand of Vietnam, especially mobile phone and the internet services. Beginning at 1996 as Vietnam set up the first telecommunications development strategy (Decision 110), the objective of tele-density was merely 5 fixed lines, and no any targets for other telecom services. However five years later, in 2001 the target for fixed line climbed up 16 phone sets per 100 inhabitants, the figure of internet subscribers was targeted at 12 percent and 26 was aim of mobile phone subscribers rate (Decision 158). Furthermore, in 2012 Vietnam addressed high targets that will be gained by 2020, such as the penetration of fixed broadband internet will be 20 percent, percentage of mobile phone broadband internet subscribers will be 40 and the term for mobile phone is to 140 percent. In 2012 Vietnam was also ranked the 10th in Asia in terms of the volume of the internet users (White book, 2013).

Regarding universal services, prior to 2005 Vietnam did not emphasize on universality of telecommunication services. Until 2006, the first universal services policy was introduced (the Program on the provision of public telecommunications services toward 2010) and in 2004 VTF, an entity belonging to MIC, was established to support the implementation of the State's policies on the provision of universal services. Subsequently, in 2011 the second program on provision of universal services was already approved by the Prime Minister and would be deployed in a five-year-interval, from 2011 to 2015 (Decision 1643, 2011)<sup>4</sup>. However, the second has been delayed and reformulated due to underestimate the pace of technology development and the compatibility with existing ICT infrastructure and other national policies of rural development (Report of MIC, 2012). As a result, the second plan has hitherto been built up.

### **3.2. Periods of universality of telecommunication services**

By applying the model of Papazafeiropoulou (2000), the authors identified the groups of stakeholders in terms of universal services implementation in Vietnam. This section is to analyse the role of the stakeholders in two periods: before 2005 and from 2005 to 2010.

#### **3.2.1. The years up to 2005**

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<sup>4</sup> Decision no 1643 issued on September 21<sup>st</sup> 2011 by the Prime Minister approving the program of provision of universal services period 2011-2015

In-depth integration into the global economy required the Vietnamese government paying much more attention on revolution of regime, laws and regulations to meet the international norms as well as to facilitate competition and economic development. Telecommunication reform was also an essential condition undertaken. Initiated by spinning off the regulatory and commercial function from DGPT in 1994 and in 1995 two new entrants were awarded licences (Viettel and SPT). This opened a new period in the Vietnam telecommunications market. It as well promoted competition and calling for investment from foreign companies into this realm, albeit still much limited.

In this period, the definition of universal services was not clear and explicit. Universal services were mainly referred as emergency calls such as medical first aid and security incidents, and basic telephone/post services provided to rural communes, tele-centres and security and defence stations lying near borders (Decree 51, 1995)<sup>5</sup>.

The key players took part in deploying universality of telecommunication services were merely DGPT, international organizations, VNPT<sup>6</sup> and citizens in which DGPT as a regulator and a policy maker and VNPT as a policy intermediary. Prior to 2005 there were few companies locating at rural and isolated areas hence the actor is not analysed.

#### **a) The nation government**

DGPT was a state organization governing fields of posts, telecommunications, radio frequency and IT (in 2003 it was renamed as Ministry of Post and Telematics and in 2007 has been turned into Ministry of Information and Communications). DGPT was not only a policy maker in charge of submitting the government drafts of law, ordinance, regulations, and development strategies but also a regulator with responsibilities of regulating charges and tariffs,

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<sup>5</sup> Decree no 51 issued on August 1<sup>st</sup> 1995 by the Government approving the statute of VNPT.

<sup>6</sup> In 1995, SPT and Viettel were awarded licences to provide telecommunication services, and in 1997 Corporation for Financing and Promoting Technology (FPT) and Netnam were permitted to supply internet services. However they did not have sufficient recourses and competence as VNPT, they only operated in urban and profitable areas. Hence, VNPT was only a player assigned the task to deploy universal services.

granting licenses in these fields (ITU, 2002; USAID, 2005).

With its role, DGPT submitted the Prime Ministry to issue the national posts and telecommunications development strategies for periods: 1996-2000 (Decision 110, 1997), and 2001 - 2010 and towards to 2020 (Decision 158, 2001). After the programmes were approved, DGPT proceeded to introduce Decision 626<sup>7</sup> in 1998 and Order 09<sup>8</sup> in 2001 in order to clarify the objectives and tasks of the strategies and requested organizations and telecom providers belonging to DGPT to deploy.

However, the deployment of universal services was very modest and poor. According to the Decision 110, telecommunication network and telephone services would be improved and developed in order to match maximum demand of customers and society. In the first years of the strategy would focus on education, health and distant-prescribe. Whilst, Decision 158 only stipulated that universal services would be provided to all regions of the country in which focusing on improving the services quality and reducing the price to equal or lower than the one of neighbour countries. Indeed, the universality of telecommunication services was not in priority agendas of the government and DGPT. The strategies' prime objectives were to build up a state of the art telecommunication infrastructure system, guarantee the absolute control of the state as well as the nation security and sovereignty.

Regarding the internet, by the hard effort of DGPT to persuade the government to connect to the internet (due to the fear of national security) until December 1997 Vietnam has just accessed to the international network (ITU, 2002). VNPT was also only body to be assigned supplying the service in rural areas, although at that time there were five companies licensed to operate on this field, including VNPT, Viettel, SPT, FPT and NetNam. The internet penetration was also really low, mere 0.25 Internet users per 100 inhabitants at the end of 2000 (ITU, 2002). Majority of users lived in urban areas, particularly Hanoi and Ho Chi Minh City and accounted for 86 per cent of all subscribers.

#### **b) International organisations**

In the process of liberalizing telecommunication sector, Vietnam coped with a huge demand in capital and management skills. These resources would assist

Vietnam build up new infrastructures as well as operate and monitor them. International organizations played an important role in the development via official development assistance (ODA). The capital mostly came from developed countries (Japan, Europe) and World Bank.

In period 2001-2003, the government offered VNPT a soft loan allocated from ODA to set up new telecommunication infrastructure in rural and remote areas. The total loan was roughly 39 million US dollars and accounted for 3% of investment capital total of this firm<sup>9</sup>. Although making up a small portion of investment capital total of VNPT, this loan also contributed to forming and expanding the networks in rural and remote areas and facilitated provision of basic telephone services.

#### **c) Policy intermediary**

In the time, VNPT ran business on all telecommunication segments including equipment, engineering, constructing, and consulting. It dominated the almost all telecommunication market, its share accounted for approximately 94% of the market (USAID, 2005). Due to the nationwide network going into almost all communes (both of telecommunication and post services), VNPT was a mere body appointed to carry out the universality of telecommunication services. According to the Decree 51, VNPT had responsibility to provide universal services as well as had right to apply the cross-subsidies mechanism for its business. By this regime, VNPT could take excess profit from one service to offset another service at levels below cost.

One substantial contribution of VNPT to universality of telecommunication services was setting up a network of post office and cultural centres (PCC) throughout the country. The initiative started in 1998 and its major objective was provision of basic post, telephone services and newspapers to local dwellers in rural and isolated areas. Before 1998, there were only 3,000 post offices in whole country which located mainly in urban areas and towns. Each post office served average number of 25,500 inhabitants. However, till 2007 VNPT set up 8,021 PCCs and the achievement attributed to forming a network of 18,941 places (including post offices and PCCs) in entire country (Tuan, World Bank, 2011). Consequently, the serving distance per place reduced from 110 square

<sup>7</sup> Decision no 626 issued on October 5th 1998 by the Director General of DGPT.

<sup>8</sup> Order no 09 issued on November 30th 2001 by the Director General of DGPT

<sup>9</sup> Project on establishing Vietnam Public Utility Telecommunication Service Fund. MIC, 2004.

kilometres to 17.5 square kilometres and the average number of inhabitants served was 4,500 per place.<sup>10</sup>

The difference between post office and PCC were besides providing post and telephone services PCCs were also places to exchange information of local dwellers and they might come to read newspaper without charge. Moreover, local communes also made a big contribution to the achievement by providing convenient places close to markets or centre of villages in order to build PCCs and VNPT only invested facilities to operate.

In 2003, with the partial funding from the state's budget VNPT installed the internet connection to round 3,000 PCCs and also distributed from one to two computers for each PCC (Tuan, World Bank, 2011). Based on that, many centres provided extra services to the local such as online games service, searching information and training for computer usage skills.

According to MIC's report on PCCs in 2008, the network of PCCs made a great contribution to universality of telecommunication services in rural area and attributed to reaching the achievement of 100% of communes having telephone services throughout country, facilitated local citizens to access to basic post and telephone services more easily<sup>11</sup>.

#### d) Citizens

Basically, in this period, the deployment of universal services was quite modest. Additionally, the social and economic condition at under-served and un-served areas was still low, most of them were living under poverty line (income per capita 1 USD per day). Hence, the demand of local citizens in telecommunication services was limited. Their major demand was able to access to basic social services, such as clean water and latrines, health services, primary and secondary enrolment, and universal and free access to legal assistance to those in need (Decision 135, 1998)<sup>12</sup>. Although citizens were subjects targeted in the governmental policies, however in this time the demand was too low, the universality of

telecommunication services was mostly implemented via the policies of the nation government and the programmes of VNPT (by developing the infrastructure and rolling out tele centres - based on the supply side). Hence, the role of the actor did not play very important.

Apparently, this was just a nascent stage of the universal service policy in Vietnam that did not fully meet thresholds of ITU (in term of availability, accessibility and affordability of universal service). According to ITU (ITU, 2002), many people could not afford to access the internet and telephone service (30 hours of monthly use would be roughly equivalent to the country's per capita GDP in 2001) and monthly telephone charge equalled approximately 25% of monthly income of a rural inhabitant in 1999 (General Static Office, 1999)<sup>13</sup>. In this period, the nation government did not focus on universal services, all of these activities were mandated to VNPT via the regime of cross- subsidization. It can be said the role of nation government was quite blurred, almost all achievements of development of universal services, albeit modesty, were contributed by VNPT. However, on the other hand, the cross subsidization regime distorted the market and allowed the dominant carrier to have a significant competitive advantage (USAID, 2005). VNPT did not have a separate accounting system or adequate financial processes for several subsidiaries involved in cross-subsidization. Hence, it was ambiguous to identify which services generated profit and the ones not (USAID, 2005).

At the end of 2003, the number of telephone subscribers reached 7.2 million in entire country, the tele-density was 9 percent. However, the users living in rural areas only accounted for 30% and the penetration rate gained 3.5 lines per 100 inhabitants. The figure for the internet in rural areas was also limited and accounted for 4.7% of total of internet users (Dung, 2012).

Some indicators of telecommunication services in Table 2 demonstrate Vietnam lagged behind their neighbour, Thailand in this time.

<sup>10</sup> Available at

<http://mic.gov.vn/tintucsukien/tinhoatdongcuabo/Trang/HoinghiToanquocvèDiêmBurudiên-Vãnhoxã.aspx>

<sup>11</sup> Available at

<http://mic.gov.vn/tintucsukien/tinhoatdongcuabo/Trang/hoinghidanhgia10namxaydunghoatdonghethongdiembdvxa19982008.aspx>

<sup>12</sup> Decision no 135 issued on July 31st 1998 by the Prime Minister referred to approving the national programme of social-economic development at most vulnerable communes and ethnic minorities and mountainous areas.

<sup>13</sup> The figure was extracted from the survey of living and income of household in 1999 conducted by the General Statics Office. Available at

<http://www.gso.gov.vn/default.aspx?tabid=417&idmid=4&ItemID=1341>

**Table 2: Telecommunications services in Vietnam**

Telecommunications services	1995	1996	1997	1998	1999	2000	The figures of Thailand in 2000
Percentage of fixed line subscribers	1.05	1.58	1.74	2.25	2.68	3.19	9.23
Percentage of mobile phone subscribers	0.03	0.09	0.21	0.29	0.42	0.99	5.04
Percentage of internet subscribers	-	-	0.003	0.049	0.115	0.262	3.7

Source: ITU, 2002-Vietnam internet case study and ITU, 2002-Thailand internet case study

### 3.2. Period of 2005 - 2010

#### 3.2.1. The first universal services policy

Prior to looking at the role of stakeholders, the paper outlines some key contents of the first universal service policy in Vietnam that was already deployed from 2005-2010.

In response to commitments to the World Trade Organization as Vietnam has become its member since 2006, the government commenced paying more attention to universal services by eliminating the cross-subsidization mechanism applied to VNPT, establishing the Vietnam Public Utility Telecommunication Service Fund, and formulating program on provision of universal telecommunications service for 5-year-intervals and integrating them into the other national programs (Chung, 2011; Dung, 2012).

In 2006, the government issued the first universal service policy, namely the Program on provision of public telecommunications services toward 2010 (Decision 74, 2006). The first program (hereinafter the Program 74) was already carried out within five year period, from 2005 to 2010, with the total of budget was approximately 260 million US dollars collecting from incumbent providers: 5% of the mobile services revenue, 4% of the revenue of international telephone services and international line subscription service, and 3% of the revenue of domestic distant telephone services and domestic line subscription service (since

2008 these collected revenue rates have reduced to 3%, 2% and 1% respectively - Decision 186, 2007)<sup>14</sup>.

The main targets of the Program 74 were the tele-density achieving 5 phone sets per 100 inhabitants (at the locations having the tele-density below 2.5 sets per 100 inhabitants); entire communes throughout the country had at least 1 tele-centre; 70% of communes of whole country had at least a public internet access centre; and whole citizens were able to access the emergency telephone services without charge (Decision 74, 2006). It was the first time Vietnam gave a clear definition of universal services. Accordingly, universal services so called public telecommunications services in Vietnam included universal telecommunication services and mandatory telecommunication services in which the universal telecommunication services were standard telephone services and standard internet access services; the mandatory telecommunication services were emergency calls, such as medical first aid, social order and security incidents, and fire extinguishment; telecommunications services in searching and rescuing, preventing and fighting of natural disasters; fixed telephone number inquiries; telecommunications services for urgent activities. The Program 74 benefited all inhabitants, households, and subjects accessing to public telecommunication services at public telecommunication service access points. All of beneficiaries had to stay at communes having the tele-density below 2.5 sets per 100 inhabitants (Decision 191, 2004; Dung, 2012).

<sup>14</sup> Decision no 186 issued on December 3<sup>rd</sup> 2007 by the Prime Minister referred to adapting the Decision no 191 issued November 8<sup>th</sup> 2004.



After five years, the Program 74 achieved remarkable success, such as the tele-density reaching 16 lines per 100 inhabitants (by far from the initial objective); 97% of communes in whole country had at least a public telephone centre; and all citizens were able to have free access to mandatory services (Report 74, 2012). The results of the Program 74 made a great contribution to reducing the digital disparity between urban and rural areas as well as facilitated development of society and economy in these areas. To gain such the achievements, the role of MIC, VTF and incumbent providers were very substantial and be clarified at the following sections. Moreover, the establishment of VTF has been considered as an ideal starting point to implement reform of universal services provision (Chung, 2011). Some main results of the Program are illustrated in Table 3.

However, some objectives of the Program 74 did not reach yet. Merely 55% of communes throughout the country had a public internet access centre and only 40% of households in underserved areas had fixed-line (Report 74, 2012). The range of universal services was still restricted. Majority of them were fixed voice and dial up internet access (Decision 43, 2006)<sup>15</sup>. The provision of public telecommunications services was be completely implemented via the form of order or assignment, not by bidding or basing on market mechanism (Circular 05, 2006)<sup>16</sup>.

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<sup>15</sup> Decision no 43 issued on November 2<sup>nd</sup>, 2006 by MIC referred to the list of public-utility telecommunications services.

<sup>16</sup> Circular no 05 issued on November 6th 2006 by MIC referred to direction on implementing the Program 74.

**Table 3: Main indicators of the Program's implementation**

Indicators	2005	2006	2007	2008	2009	2010
<b>Development</b>						
No of telephone subscribers	-	-	311,317	1,158,214	1,117,668	61,293
No of internet subscribers	-	-	9,453	16,218	57,008	30,346
No of public telephone centres	-	-	172	6	47	50
No of public internet access centres	-	-	23	2	73	231
<b>Maintenance</b>						
No of average telephone subscribers per year	402,528	580,387	938,690	1,552,809	1,751,795	1,478,314
No of average internet subscribers per year	23.83	298.08	1,421.31	34,169.67	57,963.74	70,410.75
No of average public telephone centres per year	3,521.25	3,691.59	3,756.99	3,516.03	2,942.04	2,713.75
No of average public internet access centres per year	404.92	537.66	581.35	178.34	412.81	496.60
No of average VSAT-IP stations per year	31.58	133.25	172.00	149.42	122.50	111.50
Volume of minutes of mandatory telecom calls	33,782,052	-	16,348,182	15,212,431	14,020,745	11,747,819

Sources: Report 74, 2012.

**Table 4: Comparison some main indicators before and after implementation the Program**

Indicators	2004	2010	% growth
Percentage of fixed line subscribers	2.5	16	600
Percentage of internet subscribers	0.018	0.32*	180
Percentage of households having fixed line	-	40	
Percentage of households access internet	-	0.02	
Percentage of communes having fixed line	-	97	
Percentage of communes access internet	-	55	

\*: the figure in 2009; -: no data

Source: Report 74, 2012

The figures Table 4 illustrate the impressive achievements of the Program 74 after five years deployed.

### **3.2.2. Key stakeholders in implementing universality of public telecommunication services**

In the section, the authors are to analyse stakeholders' activities in deploying the Program 74 to clarify their role.

#### **a) The nation government**

At the level of country, MIC has played a critical role in setting up, controlling and deploying the Program. According to the Decision 74, MIC had responsibility to stipulate lists of un-served and under-served areas and subjects benefited from the Program 74; to approve, manage and direct the implementation of the Program 74; to set quality standards for public telecommunication services as well as their charge rates; to direct VTF in providing finance for incumbent providers; to provide modes of support, approve levels of support for the performance of the Program 74.

In 2006, MIC introduced the Circular 05 to direct the implementation of the Program 74. It can be said the Circular 05 was the powerful regulation affecting all actors (telecom providers, VTF, and Departments of Information and Communication<sup>17</sup> in provinces-DIC) who would take part in implementing the Program 74. In particular, MIC regulated the provision of public telecommunication services was only performed via telecom carriers and the operators wanting to provide public telecommunication services had to build financial plans and submit MIC for approval, such as: the plan for setting up new telecommunications networks or upgrading the existing infrastructures; the plan for maintenance, development tele-centres, public internet centres and public telecommunications services; and plan for financial contribution to VTF. It also ruled that VTF had to make plans for collecting and supplying finance and submit MIC for approval. Regarding DICs, MIC also stipulated that in order to ensure the sync and consistency with other programmes carrying out at the local, DICs had to negotiate and give comments about the telecom providers' financial plans prior to the carriers handed them into MIC. DICs would monitor and verify the

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<sup>17</sup> Department of Information and Communications, a body of local governments, has responsibility of controlling and governing all activities regarding ICT at their locations.

amount of public telecommunication services (volume of the existing or new telephone subscribers, and the tele/internet centres that the carriers had already provided). Besides, DICs would coordinate with VTF to control the operators regarding the deployment of the Program 74 at their local. Based on these plans and the objectives of the Program 74, MIC was to order, or assign the providers to provide the public telecommunication services.

In 2008, MIC made a remarkable change of procedure for provision of public telecommunication services was that incumbent operators would implement provision of universal services via order from MIC, not by assignment. Before 2008, based on annual objectives that were separated from overall objectives of the Program 74 and the telecom providers' financial plans, MIC assigned the carriers task to supply universal services. As such, these bodies had to rely on the assigned mission, including development and maintenance a certain volume of telephone/internet users, of public telephone/internet centres...in order to run their business. However, the assigned task led to an overlap of providing universal services between these operators as there were many locations supplied the same universal services by these companies. These influenced substantially the efficiency of the Program 74 and the providers' operation. Identifying the issue, in 2008 MIC changed the form/mechanism of provision of universal services, from assignment to order (although the mechanism of auction was set a high priority by the government, however due to lack of experience in deploying and controlling universality of telecommunication services MIC adopted the form of order). In subsequent years, based on capability and existing networks of the carriers VTF (represented for MIC) negotiated and signed ordering contracts with them to provide universal services in various places.

The advantages of the order were that all parties had to comply with the terms of the order contract and the contract signed based on the negotiation between VTF and the providers, not by imposing obligation on them. According to an officer of VTF, this was a progress of managing the Program. Doing this form allowed curbing the administrative procedure and also reduced consuming time between VTF and the operators. By applying the mechanism, the providers could refuse the order of MIC if the mission was not appropriate to their existing networks or their business strategy. As a result, the funding provided to the operators increased substantially, from 798,820 million VND in 2007 to

1,181,546 million VND in 2008, and 1,269,066 million VND in 2009 (Report 74, 2012).

Furthermore, in process of formulating regulations, MIC integrated others national programs into deploying the Program 74. Especially, basing on the national strategy for social-economic development in mountainous and isolated communes (Decision 135, 1998) MIC promulgated locations provided the universal services. The program 135 was a major strategy of the country, the main objectives were reducing poverty, backwardness and assisting ethnic minority and local citizens in joining into the overall national development. By integrating into the program 135, the achievements of the Program 74 also attributed partly to gain the Millennium Development Goals of Vietnam in reducing poverty (Vietnam reached the goal prior to 8 years compared to the global goal - Report of Vietnamese Congress 660/BC-UBTVQH13<sup>18</sup>).

However, on the other hand, due to underestimation of the development of the telecommunication market in Vietnam and the pace of technology growth in the world MIC proposed the Prime Minister to levy a high rate of financial contribution on incumbent providers as well as set unrealistic objectives in the Program 74 such as, 70% of communes having access to the internet. In that sense, the operators had to make a big financial contribution to VTF and this amount put a burden on them, influenced their business plan. While the reality disbursement for supplying universal services in 2005, 2006 and 2007 was much smaller and consequently in 2008 MIC had to submit to the Prime Minister to reduce the rate.

#### **b) International organization**

Bill and Melinda Gates Foundation (BMGF) that is a non-government organization funded Vietnam 2,1 million USD to run a pilot project for improving computer usage and public internet access ability (the finance total of the pilot project was 2,6 million USD in which VTF<sup>19</sup>, VNPT, Viettel and some bodies contributed 500,000 USD). Despite of the pilot plan, positive findings of the project resulted in a larger funding from BMGF, in which BMGF has financed 33

<sup>18</sup> Available at:

<http://quochoi.vn/hoatdongcuquochoi/cackyhopquochoi/quochoikhoaXIII/kyhopthubay/Pages/van-kien-tai-lieu.aspx?ItemID=618>

<sup>19</sup> MIC was the representative of Vietnam to receive the finance and mandated VTF to manage the project.

million USD and Vietnamese organizations have provided 17 million USD in order to expand the project from 2012-2017.

The key objective of the project was that integration into state's major projects for rural development and the program for provision public telecommunication services in order to enhance computer usage and public internet access ability in rural areas. The project was implemented from February 2009 to August 2010 with supporting equipment and computer usage trainings for 99 libraries and post office and cultural centres at three provinces. Accordingly, each the place was supplied from 4 to 5 computer sets, installed fixed broadband internet connection without charge, reduced fee of the internet access from 50 to 100 percent monthly, staff at these places and local citizens were also trained in computer usage, instructed benefits of the internet. Particularly, a novel point of the project was focusing on delivering information with regard to agriculture, weather, market price and education in their native languages. Driven by international management experience, the project also stressed on internet usage promotion plans on local public media as well as organized festivals of computer and internet usage at these places in order to attract more people knowing and using the internet. As a result, although deployed in short time, the project delivered the training to 336 staff of 99 places and 4,000 local dwellers, 87,000 people known about the places and the benefit of internet. Via implementing these activities, the project also attributed partly to introducing advances of ICTs to rural citizens and assisting them accessible to the internet (BMGF, 2010).

#### **c) Policy intermediaries**

According to Papazafeiropoulou (2000), policy intermediaries are organizations acting between government and companies or citizens. As such, in the universal services policy in Vietnam policy intermediaries are VTF, DICs and incumbent operators.

#### **Vietnam Public utility telecommunication service Fund**

VTF that is an organization belonging to and is controlled by MIC had some main responsibilities, such as collecting finance from operators and providing funding for providers to deploy the Program

74<sup>20</sup>; monitoring the implementation of the Programs. All plans of VTF for collecting and supplying finance had to submit to MIC for approval prior to deploying (Circular 05, 2006).

The main funding of VTF was divided into two categories: firstly financing for telecom providers to maintain and develop universal services; and secondly was to loan facility-based-operators with low interest to build up, upgrade and extend their telecommunications infrastructure in rural and remote areas.

Although VTF is a body representing MIC to collect and allocate finance to telecommunication carriers, VTF as well played an important role on implementing the Program 74. With its position, VTF periodically worked with telecom providers to check and validate the financial contribution that the providers had to pay VTF as well as discussed with them to deliver funding for provision of public telecommunication services (Decision 110, 2005)<sup>21</sup>. As such, VTF recognized obstacles that the carriers had encountered and reported MIC to settle down the barriers. Particularly in 2007, according to a former head of VTF's division, after a few times to work with telecom operators in terms of the contribution VTF identified that some of them (SPT and HT mobile) could not afford to pay VTF with such high contribution revenue rates and also based on balancing between total of telecom providers' financial contribution paid VTF with the financial collection objective in the Program 74<sup>22</sup>, VTF reported and proposed MIC to submit the Prime Minister in order to lower the rates, from 5% of revenue of mobile service to 3%, 4% of revenue of international services to 2%, and 3% of revenue of domestic services to 1%. Besides, VTF drafted many directions to submit MIC for removing the difficulties and facilitating the carriers in implementation of universal services.

<sup>20</sup> Regarding the financial contribution, telecom providers would base on their scheduled revenue of the year to pay VTF every quarter and this amount would be balanced at the end of the financial year (March, 31th next year). In terms of providing funding, based on the plan that MIC assigned VTF would supply finance to the operators.

<sup>21</sup> Decision no 110 issued on December 8<sup>th</sup>, 2006 by Ministry of Finance guiding the accounting and contribution to VTF.

<sup>22</sup> Until the end of 2007 the financial collection objective in the Program 74 reached 80%. It would be exceeded far the initial objective if the rates of the carriers' financial contribution were not reduced.

However, due to the high interest of loan that supported operators to upgrade and build up new networks in under-served areas and the procedure of the loan was still complicated and bureaucratic, resulted in a small number of projects granted, with the loan of 125 billion VND. Meanwhile the budget for the item was 500 billion VND. This was as well a reason leading the objective of development the public internet access centres of the carries was not reached (Report 74, 2012).

### **Departments of Information and Communications**

DIC is an organization belonging to local governments locating at provinces in Vietnam. They are in charge of assisting the local governments make programmes and strategies, and control all activities relevant to ICT at their location. According to the Circular 05, DICs would control and supervise the universal services provision of the operators at their local. However, the role of the actor did not fulfilled fully as MIC did not give adequate instruction of how to check and confirm the operators' volume of provided universal services, hence it resulted in reporting MIC wrong the figures and influenced the funding that would be reimbursed the providers later (Report 74, 2012).

### **Telecommunication Providers**

One of the key factors leading to booming in installing and using telephone services in rural and remote areas was, besides the funding from MIC the strong competition between operators and in provision of new services.

In this period, there were nine carriers licenced to provide telecommunication services (Dung, 2012). However, only four operators took part in supplying universal services were VNPT, Viettel, Electricity Telecom Company (ETC) and Vietnam Maritime Communication and Electronics (Vishipel), in which Vishipel funded to provide universal services to fishermen and the rest supplied universal services to citizens living in under and unserved areas.

With the position of a dominant operator and the nationwide infrastructure, VNPT always had great advantage over its competitor in providing telecommunication services in general and universal services in particular. However, this place was strongly affected by emergence of Viettel and ETC when in 2004 Viettel initially provided mobile phone

services<sup>23</sup> and in 2005 ETC was the first player supplied fixed wireless GSM phone services. Under high pressure of the rivals, VNPT had to usually reduce the price of telephone and mobile services and adjust the way to charge the services, shifting from charging over every minute to charging only the first minute and every 6 seconds for time later. Furthermore, the carriers constantly introduced promotion programs, such as free cost of installing landline, free subscription within 3 - 12 months (or longer, depending on each promotion program of the carriers), and supplied freely telephone sets, particularly the promotion focused on consumers in rural areas where previously lack of attention and investment of the carriers. The finance to set up these promotion plans were drawn up from the providers' budget (sometimes there was ambiguities in using the operators' budget or the funding from MIC to build up the promotion plans).

On the other hand, the provision fixed wireless GSM phone services in Vietnam was also a reason resulting in the growth of telephone subscribers in rural and isolated areas, as in 2007 VNPT and Viettel introduced the new service. The advantage of the services were the call charge was the same as the one of fixed line service, however this device was usually given free and consumers might easily bring it somewhere with a certain distance.

By fierce competition between the providers and introduction the new service, as a result the volume of telephone subscribers considerably increased. In the period 2005 - 2010, VNPT developed 1 million telephone subscribers, Viettel had 1.2 million and 400,000 telephone subscribers for ETC (Report 74, 2012). This made a great contribution to growth tele-density in rural and remote areas from 2.5 lines in 2004 to 16 lines per 100 dwellers.

#### **d) Companies**

Although companies locating in rural and isolated areas were not direct beneficiaries from the Program 74, it was likely that they also got benefits as the new telecommunication networks just developed would facilitate them to access to the internet and use

telephone services on their business. Particularly, agricultural cooperatives in rural areas, via using the internet or telephone services they might find out distributors or customers who were able to help them deliver and consume their products.

#### **e) Citizens**

Basically, the Program 74 has brought a great benefit to dwellers living at under and unserved areas. According to the Report 74, till the end of 2010 more than 20 million inhabitants (appropriately 24% of national population) in 4,349 communes got benefit from the Program. They were not only supported telephone sets, modem to access to the internet, but also funded a part of monthly subscription fee. By the Program, 2,648,492 fixed lines at home were installed and the tele-density in rural and remote areas aggressively increased, from 2.5 in 2004 to 16 fixed lines per 100 citizens in 2010. Moreover, citizens living in mountainous and isolated were accessible to more than 3,000 tele-centres.

### **4. DISCUSSION**

The empirical findings show that stakeholders have an impact on the success of the universal telecommunication service policy. It is consistent with the findings of Choudrie et al (2003) states that identification and involvement of the widest spectrum of stakeholders are very useful for the implementation of a successful strategy.

It is apparent that since Vietnam introduced the first universal service policy in 2006, the universality of telecommunication services was accelerated considerably, the number of telephone subscribers tripled comparing with the figure at the initial point of the policy (in 2005) and 97% of communes in whole country had a public telephone centre. However, in order to implement the policy effectively the role of MIC, VTF, DICs, incumbent carriers and citizens should be identified and analysed fully.

The results shows that MIC played a key role in carrying out the universal telecommunication services policy, it was considered as a central position in creating a game and rules for other stakeholders participating. With its power, MIC issued appropriate directions facilitating VTF, DICs and telecom operators to implement the policy and attributing to boost of the universality of telecommunications services. In process of formulating and carrying out the policy, the involvement of the stakeholders as well

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<sup>23</sup> Although Viettel had provided telephone voice service (VoIP) in 2000 and landline service (PSTN) in 2003, they really developed aggressively in 2004 when it supplied mobile phone services, ended the monopoly of VNPT (in mobile phone services) and brought a newly charging way to consumers.

as consideration of their interests were also critical, especially DICs and the carriers. Although the state owned providers must follow the directions of MIC, however as their interests are looked at, their obstacles are removed it is likely that the effectiveness of the policy will be enhanced further.

It also demonstrates that VTF, DICs and telecom providers also played an important role. VTF and DICs were intermediaries between MIC and the operators, hence it might identify the barriers of regulations that MIC issued but they and operators were encountering. Based on that, they might report MIC and found out solutions more effectively and quickly than MIC did itself.

Whilst, telecom providers as long arms of MIC to reach rural inhabitants. By creating effective promotion programs and providing appropriate telecommunication services, the carriers furthered the penetration of basic telephone services in rural and isolated areas.

## 5. CONCLUSION AND FUTURE RESEARCH

This paper examines the role of stakeholders on implementing universal telecommunication services by applying theory of stakeholders and qualitative methods with Vietnam as a case study. The empirical findings show that stakeholders have a great impact on the success of policy of the universal telecommunication services, especially the role of the nation government. It implies that the implementation of the policy requires the participation of a wide variety of affected actors in which the government should play a central role and their interests should be identified and balanced with the general objective of the policy.

Nevertheless, the paper has also some limitations. Firstly, the data collection mainly relied on the secondary and archival documentations. Although some interviews also were conducted, the impact of telecom providers in building up the universal services policy has not been showed up clearly. The paper only focused on analysing the role of the stakeholders in implementing universality of telecommunication services. Secondly, the groups of the stakeholders relating to universal services were diverse and the events occurred a long time ago, hence the role of some actors has not been looked at in detail, such as the role of international organizations before 2005 and of DICs after 2005.

Future studies may apply the questionnaire methods and conduct more interviews on the nation government, DICs and managers of telecom operators in order to look at clearly their role. Interviewing should be done together with some of academic people and be recorded to prove as a validity evidence.

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