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#### **Conference Paper**

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14th Asia-Pacific Regional Conference of the International Telecommunications Society (ITS): "Mapping ICT into Transformation for the Next Information Society", Kyoto, Japan, 24th-27th June, 2017

#### **Provided in Cooperation with:**

International Telecommunications Society (ITS)

Suggested Citation: Lee, Jongyong; Baek, U Jin; Lee, Jongtae (2017): An Exploratory Study Comparing Public Telecommunication Policies on Telecommunication Tariffs Supports in Korea, Japan, European Countries, and the U.S., 14th Asia-Pacific Regional Conference of the International Telecommunications Society (ITS): "Mapping ICT into Transformation for the Next Information Society", Kyoto, Japan, 24th-27th June, 2017, International Telecommunications Society (ITS), Calgary

This Version is available at: https://hdl.handle.net/10419/168508

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# An Exploratory Study Comparing Public Telecommunication Policies on Telecommunication Tariffs Supports in Korea, Japan, European Countries, and the U.S.

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#### **Abstract**

Keywords Digital divides, Tariffs, Telecommunications Tariffs, Tariff Policies

### Introduction

Even though there have been enormous public and private debates on building more concrete and pair telecommunication tariffs, it is still not easy to considering diverse people together. Nonetheless, it is quite important to consider how to create and to develop more pair tariff policies in modern countries, especially global readers in the fields of telecommunications and information technologies such as Korea, Japan, European countries and the U.S.

For instance, without careful considering pair tariff policies, digital divide issues would be more complex and worse. Digital divide commonly means the explicit and/or tacit gaps

among diverse business/social leaders, the handicapped, and the ordinary and extraordinary individuals in the points of fairness on accessibilities, usability, and welfares (Acılar, 2011; Lee and Park, 2011; Lee, 2016). Diverse previous researches including Barzilai-Nahon(2006), Lee and Park(2011), and Lee(2016) Larrison, Nackerud, Risler, & Sullivan(2001). have suggested that proper public policies on these fairness issues should be treated and considered in a long-term view.

To solve this concern, diverse leading countries in IT and telecommunication fields have studied carefully and qualitatively the public policies of other countries for it is not easy to study and quantitatively the future effects and industrial issues. This study also would proceed an exploratory study comparing the leading countries' telecommunication tariff policies. For more details, this study would compare current/future public policies and the related issues/debates in the countries such as Korea, Japan, EU, and the U.S. Especially, this study would focus on legal bases, cases of tariffs reductions, the obligation on the universal services, and the raised or expected issues.

## **Case Studies**

# Telecommunication Policy of the U.K. on Universal Services

The scope of the Universal Service Obligations is defined by the European Commission (EC). For instance, based on Communication Act 2003, the secretary of State for Trade and Industry specifies the services which to be provided by the Universal Service Order in the U.K. The Act declined that Ofcom of the U.K. has a responsibility to implement the order to provide universal service. Also, BT and Kingston Communications provide the following services following the guidelines of the government sectors:

- special tariff schemes for low income customers
- a connection to the fixed network, which includes functional internet access
- a reasonable geographic access to public call boxes

- special services for customers with disabilities
- Fee discount program for low income customers

The LUS was introduced in 1993 and had focused on supporting the light users who would charge the lower subscription fee with repayment of line rental charges while the IC which was introduced in 1999 had been programmed to provider the subscribers with both the subscription fees and calling fees. Interestingly, IC supported the subscription fees after the monthly charging while supporting the calling fees before the tariff charging(ten pences per minute).

To solve the found problems after introducing the IC and the LUS, "BT Basic" was introduced in October, 2008 as newer lower incomers supporting program. Introducing new fee charging program to compensate the fact that it is more for light user than for low income class, as existing program is concerned to be abused

Low-income subscribers can get discount benefit with 14.83 pounds including 4.5 pounds free calls every quarter. The new program was designed to solve the problems of the earlier programs because the earlier programs could not stop the subscribers abusing the program benefits. Also, the BT basic program includes the cases of income support from the government, income-base jobseeker's allowance, employment and support allowance, and pension. It may mean the newer program – the BT basic program – would focuses on considering more complicated conditions both of income and of non-income to be supported by the government sectors rather on counting the income level only.

Also the government sectors of the U.K. now focuses on defining the support principals for the tariff subscribers with disabilities. According to the regulation policies of the U.K., telecommunication service providers must provide a wide range of services for the subscribers with disabilities. For instance, the service providers should support access services to text relay services, free online yellow page services, technological troubleshooting services without any extra tariffs, contact supports, and other universal services for the handicapped subscribers.

We can understand that the universal services and the special tariff programs in the U.K. for the handicapped levels commonly have been charged to support the handicapped subscribers with both financial and non-financial supports to avoid exhaustive and useless expenditures.

# **Japanese Telecommunication Policy on Universal Services**

Also Japanese government has tried to support the Low-income telecommunication subscribers, the subscribers with disability and vulnerability who are beyond the scope of the universal welfare system. The public responsibility on the support policies are on the department of communication regulation's charge in Ministry of Health, Labour, and Welfare, Japan. Those policies are also concentrating the handicapped subscribers to maintain their telecommunication services without caring their income levels with financial and non-financial ways simultaneously.

For instance, Japanese government sectors are providing the handicapped subscribers with the benefits of livelihood protection system and providing telecommunication expense through livelihood protection system. "Livelihood protection system" focuses on providing the low-income subscribers the daily expenses for the housing, education, medical and nursing services. In this system, the people whose household incomes of pension and child caring are under the minimum living expenses, the people who are provided by the government with the security protection expenses, and the people whose living expenditure are close to or under the minimum.

Following the regulation policies on providing the low-income people, Japanese government divides the life supporting public services into diverse levels. According to the policy, telecommunication support is listed on the second service category along with the support systems of lighting, heating, furniture(housing), and other living services. It should be considered with care that Japanese government is treating the universal services in telecommunication category as similar as the basic life services. These policies are conducted

and managed according to the analysis result of the national consumer survey every five year with national advisory council's experts.

. The survey mainly consider the low-income household's consumption and amend the criteria through analyzing the data of national survey on consumers. To build and to amend the regulation policies on the universal service, the low-income household consumptions (including daily, weekly, monthly, quarterly, and yearly expenditures) for transportation, telecommunication, amusement, and others would be considered as the top factor within national survey results on consumers.

Nonetheless, still considering the financial cost support is the main idea of Japanese universal services support systems. For instance, still Japan financially support the low-income telecommunication subscribers more than other North-Eastern Asian countries and Asian-Pacific countries, so there have been diverse debates on considering the legitimacy of the current financial support policies. This may mean that Japanese universal service support systems also could follow the case of the U.K. According to the current policies, the life support for the low-income people in Japan is close to the double or one a half to that of South Korea(Japan: Almost 175 thousand Yen – around ten to eleven times to Korean currenc, Korea: 830 thousand Won).

# **Conclusion and Implications**

This study's result would be expected to suggest the possible alternatives replacing and supporting current tariff policies with the comparison of the advantages and the disadvantages of each policy in the countries. The research result would be meaningful especially for Korea because still the debates on solving the digital divide issues seem to be at the beginning lines even though the country is one of the leaders in IT and telecommunications fields. For instance, this study would suggest the considerable alternatives in terms of whom, why, how, and when to be supported.

### References

Acilar, (2011). "Exploring the Aspects of Digital Divide in a Developing Country", Issues in Informing Science and Information Technology, Vol. 8, pp. 231-244.

Barzilai-Nahon, K. (2006). "Gaps And Bits: Conceptualizing Measurements For Digital Divide/s". In The Information Society, Vol. 22, No. 5, pp. 269-278.

Larrison, Nackerud, Risler, & Sullivan, (2001). "Welfare recipents and the digital divide", Vol. 19, Issue 4, Available at: http://www.tandfonline.com/doi/abs/10.1300/J017v19v04\_01

Lee and park. (2011). "Overcoming the digital divide in the rural Areas: Focusing on the Mobile Divide", Agribusiness and Information Management, Vol. 3, No. 2, pp. 33~42.

Lee. (2016). "A Follow-up Study on Smart Divide Issues in Korean Rural Area", Agribusiness and Information Management, Vol. 8, No. 1, pp. 27~32.