

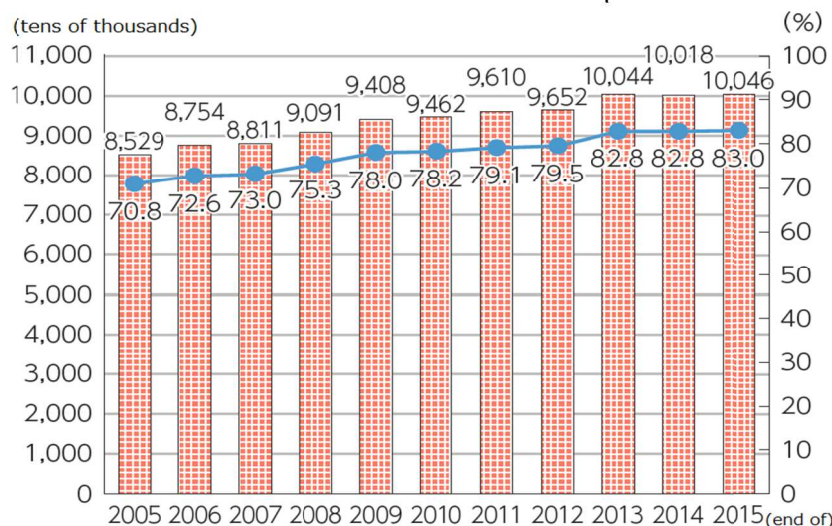
Building an enabling environment for access to the Internet
ITU: Open Consultation of the ITU CWG-Internet (February-September 2016)
Kyushu Telecommunication Network Co., INC Submission

Introduction

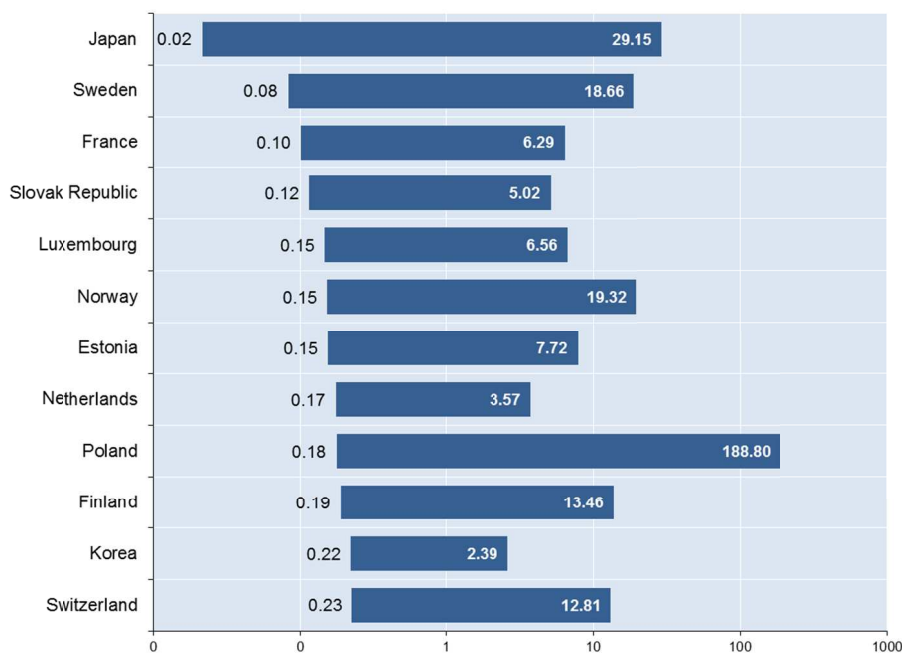
Our company, Kyushu Telecommunication network, is a local telecommunications carrier which builds its own fiber optic cables and provides FTTH service in Kyushu area, Japan.

In Japan, the Internet penetration rate was 83.0% at the end of 2015 ^[1]. And according to OECD 2015 data, fixed broadband price per megabit per second was the lowest in the world ^[2]. In this comment, we will provide some clues of high Internet penetration with cheap price in Japan based on our experiences.

[1] Transitions in the number of Internet users and the penetration rate among the general population



[2] Range of fixed broadband prices per megabit per second, September 2014, USD PPP



Source [1]: White paper 2016 Information and Communications in Japan, MIC Japan

Source [2]: OECD Digital Economy Outlook 2015

1. What are the elements of an enabling environment to promote Internet connectivity?

The most important factor is “multi-layered competition between telecommunications carriers” following the Telecommunications Liberalization 1985. There are various carriers which provide Internet services in Japan: NTT West and East as dominant incumbent carriers, KDDI and Softbank as NCCs (new common carriers), electric power group carriers (including us), CATV operators and many ISPs.

Under the free competition among carriers, all elements, such as technical innovations, lower charges, and new services development, have been created that are essential to promote broadband Internet.

In addition to developing Internet access infrastructure, developing Internet utilization environment is another important factor. In order to access Internet anytime, anywhere, an affordable price, easily obtainable devices, and various wireless networks, all these are also important elements to promote Internet connectivity.

2. What are the elements of an enabling environment to promote an affordable Internet?

As we mentioned in previous question, multi-layered competition is essential to promote an affordable charge of Internet access. Under the various operators’ service-based and facility-based competition, technical innovation has occurred leading to lower prices.

When the entrant uses the facilities of incumbent, competition is called service-based competition. In Japan, NTT East and West have been offering DSL network sharing and wholesale FTTH access. When the entrant builds its own facility, competition is facility-based. In Japan, electric power groups built their own fiber optic cables from the early stage of FTTH and CATV operators followed recently.

Under service-based competition, the entrants start operations rapidly and on wider geographical bases. However, the entrants rely on the incumbent network for providing services, and hence, are restricted by the incumbent choice of price, service and technologies.

Under facility-based competition, on the other hand, the entrants build their own network efficiently with new technologies and business models and set strategic price lower than incumbent.

In Japan, service providers and new facility-based providers have been engaged in a price war to build a customer base in emerging market. Therefore, incumbent carriers are compelled to reduce their retail price to catch up the competition.

It is also important government regulates a dominant or monopoly giant in order to maintain fair and free competition.

3. What are the elements of an enabling environment to promote the quality of access to the Internet?

In order to promote the quality of access to the Internet, we should realize “High-speed, error-free, and ubiquitous” Internet service.

For that purpose, it is important to facilitate the high-speed FTTH Internet without any limitation to its usage at home, and the wireless Internet access via mobile phones outside.

Also it is necessary not only to roll out the Internet access infrastructure, but also to develop human resources to maintain it to work properly.

Moreover, it is important to exclude the excessive filtering service. It's because the excessive browsing regulation may disturb that we can use the Internet conveniently.

In association with the traffic growth due to expanding the service by OTT (such as the software update), its charge is paid by other companies which constructed infrastructure for the Internet. We think it is one of the problems to solve for the quality of access to the Internet in the future.

4. What are the elements of an enabling environment to build confidence and security in the use of the Internet?

Firstly, “Secrecy of Communication” is the most important principle to build confidence and security. It means that we must keep the secret like details of communication.

Based on that principle, the following efforts by the telecommunication companies are necessary.

- The effort for connection: Enhancement of the access capacity and external bandwidth etc.
- The effort for protection: Firewall and Filtering service for young people etc.

5. What is the role of Governments in building an enabling environment?

The role of Governments should be minimum such as regulation and direction for fair competition.

– (ex.) The regulation which prohibits the monopoly and the oligopoly-

It's not good that the excessive browsing regulation by the Governments disturbs the free flow of information.

In addition, one of the most important roles of Government is to provide financial support for the rural area where the private company cannot construct infrastructure for Internet in economic reason.

It makes more and more people to be able to use the Internet.
