

Contribution from Japan Internet Providers Association (JAIPA)

Building an enabling environment for access to the Internet

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

First of all, the residential network should be provided at a low price to promote Internet connectivity where the penetration rate of the Internet is low. In Japan, we saw rapid penetration of the Internet when the connectivity by the Dial-up and xDSL because of the provision of the cheap lines. This widespread needs the upper layer network. So the nation-wide trunk line has been enhanced.

The characteristic feature of Japan, Japanese live in clusters in the small Island, which has made it easier. Furthermore, the penetration of infrastructure made the Internet content to become popular, the Internet has been grown in a short term. Not only the residential line, but also the device which is for connecting to the Internet, should be supplied at an inexpensive price. Compared with the period when we only used the PC to access the Internet, after the people could get the smart-phone and tablet in a low price, the number of the Internet users has been increasing very fast.

Ordinary, the enlargement of the adoption of the residential network is the first thing to do. However, sometimes it depends on its local feature, geographical, historical, legal and cultural background. So comprehensively we should consider these factors. The number of Internet users is the biggest element to promote Internet connectivity, so we should implement effective ways to increase the number of users.

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

The important Internet resources are the residential network, trunk lines, the Internet exchange points, transit and etc. When this infrastructure is stable and at an appropriate price, people can use the Internet connectivity in an affordable price. If a few selected telecommunication carriers, Data Centers, the Internet exchange points, and content companies are accorded precedence or are permitted as a monopoly, this will prevent the price reduction. Then we should give special consideration to create the competitive environment vertically and horizontally.

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

The installation of the Internet infrastructure is essential. To maintain the network, we should administrate the state of the traffic mundanely. In these days, all the more the rich contents traffic, like the streaming, is increasing. From now on, the issue is how and who should share the cost. In Japan, the traffic for the Operating System to update is the big issue, because it causes the congestion or the congestion of the network traffic. And we forecast that IoT devices will create a lot of traffic, because even each device will make very small traffic but the number of the IoT device is very large. In the near future we will have to take care of their traffic and also security.

In the past in Japan, most of the traffic was occupied by the P2P network traffic. Incredibly its traffic was created by just a few percent users! Originally the Internet was created with the thought that the user is "a good man". So this phenomenon occurred. Then the packet shaping has been tolerated under certain conditions.

The capacity building about the human resource of who can administer the home network and large-scale network, is also the essential condition to promote the quality of access to the Internet.

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

In the late 90s, the Internet had been growing popular. At that time, it was the so called "the Internet is for good man". The cybercrimes were very few and the users had a certain IT literacy. Serious cybercrime was rare. But the cybercrimes have been increasing with the growth of Internet users who don't have the knowledge about the IT.

Many vulnerabilities in Internet applications exists because it is on the basis the "the Internet is for good man" concept. For example, like SPAM mail, we have made efforts to solve this problem for more than 20 years. But we still have huge amount of SPAM every day.

Almost all of the nations stipulate the punishment for the child pornography. But we cannot make crime countermeasures in worldwide cooperation, because the criteria and punishment of the child pornography is different from country to country. It will be useful to set up the framework to exchange the information and best practices about the serious and heavy impact cybercrime, and discuss these matters.

For comparison, the Japanese law strictly prohibits the censorship of telecommunication. The secrecy of communication is guaranteed by the constitution. So the related ministries, ISPs, Lawyers and jurists have come together to discuss. They made a guideline to block the child pornography sites under certain conditions. Finally the ISPs in Japan have started to block child pornography sites. But to maintain the system of the blocking is difficult. Because it is not easy that we keep it fair and transparent. So in Japan we will never use it to block the other illegal contents. This is only for the child pornography.

On the other hand, we, the user and ISPs have the limitation about the security of the operating systems and devices. But the influence is not small. Not only about the brand-new devices', but also old-fashioned devices' security should be taken care of the vulnerability by the maker (or vender), because we cannot do anything about them. Only the maker or supplier can take care of them. They have to take some ways about security for certain period of time in a responsible manner.

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

Fundamentally we insist that any government must not intervene in the communication especially about the contents, in terms of the democracy and the liberalism. All stakeholders should discuss the ways and means to solve the problems and promote and develop a sound and solid Internet.

The Internet has been expected to make the world "FLAT". But the wealth gets concentrated on a few companies. If the governments will not deconcentrate it nor keep the fair competitive environment, this situation will continue.

This situation may cause oligopoly or monopoly. Then the delivery system of the Internet by the oligopoly or monopoly will tend to stop the reduction of the price. The government of one nation will not take adequate measures against this issue. Then the discussion and/or consideration by the multi-stakeholder will be needed.

Even if the rule is made, it should not be on the communication itself. It should be to keep the competitive environment. The rules should make the better external conditions to avoid the concentration by like taxation system or anti-monopoly policy.

And simultaneously to make a climate that encourages newcomers is very important. This barrier should be low to keep the competitive environment fair.