The current state of American, European, and Japanese network neutrality debates and their differences

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Another look at the meaning of network neutrality

In the U.S. and Europe, the debates surrounding so-called "network neutrality" regulations show no signs of abating. The problem of network neutrality (referred to below as "net neutrality") is like a bone stuck in the throat of the U.S. telecommunications policies and the problem of regulation has remained unsettled for approximately a decade. Even in Europe, which initially took the position that "this is a regulatory agenda that has nothing to do with us, and we oppose the export of the net neutrality debate from the United States," the situation began to change in the second decade of the 21st century. Thus, like the U.S., the problem of regulation at the EU level has become a topic of continual debate. Due to the spreading of the problem across regions and the length of time it has taken to come up with a solution, this technical term has come to be widely known. In the U.S., in particular, not only economic newspapers like the Wall Street Journal, but also general newspapers, such as the Washington Post and the New York Times, frequently run articles on this topic. However, due to ambiguity (or in a more positive sense, the diversity or inclusiveness) not only of the term but of the focus of the debate itself, it seems that few people understand the true meaning of net neutrality outside of the U.S., even in the ICT industry.

Therefore, this author would like to reexamine the definition of the term and offer a simple explanation. However, "net neutrality" does not have the same definition in Europe as it does in the U.S. and Japan, and it is important to understand that within a single country, those involved in the debate may define (or interpret) the term in a manner that best benefits them. With this in mind, this author would like to propose the definition of "a debate concerning regulations governing mainly network carriers with the goal of ensuring fair usage of the Internet." Real-life examples include debates concerning handling of the following issues:

(1) How should consumers be informed of traffic handling methods by network carriers, such as reductions in speed when a user exceeds a certain monthly download quota?

(2) Should network carriers be permitted to deny downloads of OTT player applications that compete with video services that they themselves provide?

(3) Should carriers be allowed to offer faster, higher-quality broadband access to customers who pay optional or additional fees?

(4) Should there be regulations on the minimum broadband download speed provided to all customers regardless of the network status?

(5) Under what situations should bandwidth control be allowed when congestion occurs, and what methods should be used?

The aforementioned cases are presented here as hypothetical examples, but in fact, they correspond to real-life topics in net neutrality debates in the U.S., Europe, and Japan. Examples include the following: "transparency of information" (1); "non-discriminatory treatment of customers" (2, 3); "minimum service quality" (4); and "presence or

absence of bandwidth control" (5). At this point, some readers may wonder why such straightforward issues are seen as problems, but the explanation for this will become clear later in this discussion.

Regarding the above definition provided by this author, it is important to remember that the question of what form regulations should take does not necessarily imply that new regulations should be put in place. Instead, the discussion should include a consideration of whether or not regulations are necessary. Most U.S. network providers, including cable television companies, such as the major network carrier Verizon (and its affiliate Verizon Wireless), insist that regulation is not necessary and they continue to fight against attempts by the Federal Communications Commission (FCC) to implement net neutrality regulations by filing lawsuits claiming that "they have no authority" to do so. Thus far, the litigation has been successful overall. In addition, this author believes that not only network carriers but also content, application, and platform carriers (referred to collectively as OTT carriers) are also responsible for fair Internet usage, which is why the word "mainly" was added to the above definition. To date, in the debate over regulation, the OTT side and its supporters (scholars, users, etc.) have demanded to implement new regulations on network carriers, and regulatory groups have also moved in this direction. However, as the presence of OTT in the ICT market grows stronger, they have also come to have a great influence over fair usage of the Internet. Furthermore, there are increasing situations in which major OTT and network carriers jointly form new alliances, draw up business models, and provide new services. In this environment, there is little doubt that the time has come to reevaluate the unilaterality of discussions seeking to handle the net neutrality issue only through "restrictions on network carriers."

The status of the contrasting net neutrality debates in the U.S., Europe, and Japan

Following up on this introduction, a summary of the developments regarding the net neutrality debates in the U.S., Europe, and Japan is presented in Table 1.

In addition, Table 2 presents the laws that provide a foundation for regulatory authority over net neutrality, and based on this, it also presents the regulations that have been implemented (or are in the process of being implemented) by each country.

Although the contrast between Table 1 and Table 2 should be sufficient to provide a grasp of the overall situation, this author will also describe the situation in the U.S., Europe, and Japan in detail below.

(1) U.S.

As shown in Table 1, Verizon and other carriers sued the FCC over its net neutrality regulations established in December 2010 and January 2014, a federal appeals court in Washington, D.C. handed down a ruling that invalidated a portion of the regulations. The 2012 FCC regulations and the requirements invalidated by the ruling are listed in Table 3.

Table 1. The status of the debates regarding net neutrality regulations in the U.S., Europe, and Japan (as of December 2014)

U.S.	Europe (EU)	Japan
* A portion of the regulations established by the FCC in 2010 was invalidated by a lawsuit, and a draft of new regulations is in progress (public comments already collected). * The President and the U.S. Congress have both offered opinions and legislation proposals.	* European Parliament and the European Council are currently debating a draft of regulation by the European Commission (EC) * Being treated as a topic in discussions surrounding the unification of wide-ranging EU telecommunications regulations, not in the form of individual regulatory issues.	* The debate has settled down for the time being due to the 2008 guidelines (amended 2012 version is the most recent) created by the concerned parties, based on a report from a 2007 colloquium by the Ministry of Internal Affairs and Communications.

Table 2. Rules and legal bases of net neutrality regulations (as of December 2014)

	U.S.	Europe (EU)	Japan
Primary legal basis	Federal communications law	* EU framework directives * EU universal service directives	Telecommunications Business Law
Main type of rules implemented	FCC regulations (in progress)	Regulations or equivalent (in progress)	"Guidelines for Bandwidth Control Operational Standards" (created independently by both the relevant industries and the Ministry of Internal Affairs and Communications)

Table 3. The FCC's 2012 net neutrality regulations and details regarding rulings

	Applicable Carriers	Summary of requirements	Ruling on appeal
(1) Transparency requirement	* Fixed BB (Note 2) * Mobile BB	Disclosure of conditions for customary NW management practices	FCC supported
(2) Blocking prohibition (see Note 1)	Fixed BB	Prohibition on the prevention of access to legal C/A/S (Note 3) and non-harmful devices	Invalidated, sent back to the FCC
	Mobile BB	Prohibition on prevention of access to legal sites and applications competing with the company's own voice and video phone services	
(3) Non-discriminatory handling requirement (Note 1)	Fixed BB	Prohibition of unreasonable discrimination against transmission of legal traffic	Invalidated, sent back to the FCC

Note 1: The requirements in (2) and (3) are accompanied by a proviso stating that "reasonable network administration is allowed."
Note 2: "BB" is an abbreviation for broadband.
Note3: The abbreviation "C/A/S" refers to contents, applications, and services, respectively.

The controversy of the U.S.'s characteristic problem of net neutrality has spanned more than 10 years. At the present time, there are only two categories of service under federal telecommunications law: "telecommunications service" and "information service." This long-lived controversy has resulted in limitations preventing the appropriate handling of increasingly complex forms of Internet usage. Regarding these legal limitations, interested parties, such as Verizon, have filed lawsuits whose main concern is the "presence or absence of regulatory jurisdiction," and thus far, the FCC has continued to generally lose these lawsuits.

While the January 2014 ruling of the court did acknowledge that the FCC has the authority to regulate broadband access, the FCC itself classified this service as an "information service" in the first decade of the 21st century, thus determining to exclude it from general public telecommunications (common carrier) service. Now, the FCC has been prompted to reconsider this from the point of view that it would be inappropriate to impose the same regulations as those that apply to common carriers.

Based on the ruling, the FCC sought feedback on a draft of new net neutrality regulations in May 2014, resulting in nearly four million public comments, a new historical record. From the perspective of "free usage of the Internet," it is apparent that this has become an extremely contentious issue among ordinary citizens (consumers). Although, in the new regulations currently being formulated, the FCC continually requires "prohibition of blocking," it states that this "should be interpreted as requiring only a minimum level of access." Moreover, regarding "non-discriminatory handling," the language has been changed to "prohibition of commercially unreasonable practices." However, the definition of "a minimum level of access" is a matter of opinion, and there is room for widely varying interpretations of the phrase "commercially unreasonable." Therefore, even if new regulations are adopted, it is more likely that further lawsuits will be filed.

Furthermore, there is a high risk that the FCC will continue to lose lawsuits due to lack of an answer to the basic question, "Does the FCC have regulatory jurisdiction over this issue?" However, according to news reports, the FCC is leaning toward announcing that it will regulate broadband access as a "telecommunications service."

The disorderly twists and turns of the U.S. net neutrality since the middle of the first decade of the 21st century certainly give the impression that missteps were made somewhere along the line. The vagueness of the aforementioned terms "a minimum level of access" and "commercially unreasonable," as well as the FCC's consistent additional comment regarding that "reasonable network administration is allowed," (refer to note 1, Table 3) invites the question, "What does 'reasonable' mean?" It is difficult to clarify these vague definitions in advance through prior regulations based on the laws of telecommunication. Therefore, it would seem that the most "reasonable" approach would be to keep prior regulations on net neutrality to the bare minimum and to make determinations regarding issues on a case-by-case basis as they occur. Net neutrality is a problem regarding which "after-the-fact regulation based on competition law" is preferable to "prior regulation based on business law."

Photo 1. Advocates demanding, "Reclassify Now!" at the FCC assembly hall, in response to net neutrality regulations being halted. Delegates on the stage smile wryly.

Source: The Washington Post, “FCC chair has all but confirmed he’ll side with Obama in net neutrality,” 1/7/2015

2) Europe (EU)

Under the current EU telecommunications regulatory framework (enacted in 2009), a framework directive stipulates the principle of “Internet freedom,” and a universal service directive states that National Regulatory Authorities (NRAs) in member nations are allowed to impose requirements for maintenance of “transparency” and “a minimum level of service quality” (see Table 4). However, directives such as these do not use the term “net neutrality,” and the framework directive also uses extremely general wording, specifically, “NRAs and BEREC [see note] should work to further the interests of EU citizens by promoting distribution of information and the ability of end users to access it as well as the ability of users to operate the applications and services selected by them [Article 8.4].”

Note: The Body of European Regulators for Electronic Communications (BEREC) is primarily an advisory board to the EC comprising the top personnel from telecommunications regulatory organizations in member nations, such as the Chief Executive of Ofcom in the U.K.

In the EU, the EC announced a proposed recommendation (non-legally binding) for improvement of transparency for end users in May 2012 even though its policy was not to consider regulating net neutrality through legislation. However, the EC changed its position in May 2013, proposing a prohibition on anti-competitive blocking and throttling of Internet traffic (bandwidth control).

Table 4. The portions of the EU Universal Service Directive regarding net neutrality

Contracts and transparency **(Articles 20.1–21)**	* Contracts for end users must include the following information: ・ Limitations on access and/or use of services and applications ・ Traffic management methods employed as well as their impact on service quality * National Regulatory Authorities (NRAs) may impose the following requirements on carriers: ・ Provision of the above information (for example, publication on websites) ・ Notification to enrollees when the above restriction methods change
Minimum level of service quality **(Article 22.3)**	* To prevent decreases in services on the overall network as well as traffic delays, a minimum level of service quality may be imposed on carriers. * NRAs must inform the EC and BEREC of proposed corrective actions * NRAs must give maximum consideration to comments and advice from the EC. However, these will not be legally binding.

During that time, the EC had begun a regulatory procedure that aimed at unifying telecommunications regulations across the EU (called "Telecom Single Market" [TSM]), addressing the challenges of unifying permit systems and apportioning wireless frequencies in the EU along with open Internet (in other words, net neutrality). Moreover, as part of the draft of TSM regulations adopted by the EC in September 2013, a requirement for greater transparency by network carriers was imposed. Furthermore, the provision of "specialized services" provided at a more advanced QoS level was clearly permitted. These are broadband-related services provided on the basis of agreements between network carriers and customers that are differentiated from other broadband services, thus corresponding to the "allowance of commercially reasonable practices" included in the draft of regulations currently being formulated by the FCC.

The European Parliament, which is responsible for discussing the draft of the EC regulations, voted at the TSM Regulation Draft First Review Meeting (a meeting held for voting purposes) in April 2014 to support a stronger regulatory approach on the management of specialized services and traffic than that proposed by the EC. In the future, however, when the European Council (composed of telecommunications ministers from each country), which more strongly reflects the views of member nations, begins deliberations in earnest, it is expected that it will not ultimately produce a clear definition of "specialized services" and will merely announce non-legally binding principles related to net neutrality.

In advance of the EU, Holland revised its telecommunications law regulating net neutrality in 2012, thus prohibiting additional fees on special services and premium (paid) applications such as VoIP. In addition, it is requesting the EU to implement tougher net neutrality regulations. For instance, proposing tougher restrictions on traffic management in drafts of EC regulations. However, German Chancellor Angela Merkel clearly indicated in a December 2014 speech that she opposed the European Parliament moving the debate in the direction of tougher regulations on specialized services.

In the first decade of the 21st century, the EU attempted to hold the U.S. net neutrality debate in check, by showing that it looked unfavorably on the subject through comments such as, "the current EU regulatory framework is sufficient to handle the issue in Europe" (and remaining on guard concerning this "debate from the USA"). The transformation of this position to one favoring active implementation of regulations (from 2010 onward) is linked with the widespread occurrence of

reductions in service quality due to congestion from increased mobile traffic and implementation of speed restrictions and additional fixed-rate fees based on monthly download quantities aimed at avoiding such congestion. However, as described above, there are wide differences between the EU and member countries as well as among the different member countries regarding the opinions to whether regulations should be implemented or not, with no apparent conclusion.

(3) Japan

Japan began addressing the issue of neutrality at a relatively early date. More specifically, following the developments in the U.S., the Ministry of Internal Affairs and Communications held debates at the "Colloquium on Net Neutrality" from 2006 to 2007. The report from the colloquium announced the following three principles.

(1) "It must be possible for consumers to flexibly connect to the network (IP network) and freely access content, applications, and layers."

(2) "It must be possible for consumers to freely connect terminals that comply with technological standards to the network (IP network), and to flexibly communicate between terminals."

(3) "Consumers must be able to make fair use of communications layers and platform layers at reasonable prices."

These are essentially the same points included in the "Internet Policy Statement" (a declaration that was not legally binding) announced by the FCC immediately prior to this in 2005, although the wording of (3) is somewhat stronger. Based on these recommendations, the "Association for Consideration of Guidelines for Operational Standards on Bandwidth Control" (see note), which is made up of four groups (the Japan Internet Providers Association (JAIPA), which represents ISPs; the Telecommunications Carriers Association, which represents telephone companies; the Telecom Services Association, which represents a wide range of carriers in the ICT industry; and the Japan Cable Television Association), announced the "Guidelines for Operational Standards on Bandwidth Control" in May 2008 after which the Ministry of Internal Affairs and Communications approved bandwidth control based on these guidelines. Subsequently, due to the increase of concerns regarding congestion on the networks of mobile carriers as well as the national government's revision of the "Telecommunication Business Law Rules and Guidelines for Consumer Protection," which required concrete details on bandwidth control to be made public (based mainly on a present data analysis of bandwidth control in the mobile field), the association announced revised versions of the above guidelines in June 2010 and then in March 2012 (the current version).

Note: Established by these four groups in September 2007; subsequently, the MVNO Council joined in January 2010.

These guidelines discuss the permissibility of bandwidth control in relation to two points, the "privacy of communications (Article 4)" and "fairness of use (Article 6)" in the Telecommunications Business Law, stating in the introduction ("Legal Character") that, "In the future, in the event that a telecommunications carrier implements control in accordance with these guidelines, even in the event that bandwidth control is conducted in a manner that formally infringes upon the 'privacy of communications,' it is expected that this will be judged to be proper business behavior that is not illegal." A later portion of the same guidelines comments on cases of bandwidth control when network congestion occurs, stating that, in most cases, header information processing for purposes of bandwidth control is "proper business behavior [by ISPs]."

The net neutrality debate is more settled in Japan than it is in Europe or needless to say, the U.S., and those involved in the ICT industry are not ordinarily aware of it. One might imagine many

reasons for this, such as “access regulations were originally strong,” “there are no enormous and conflicting OTTs,” and “administrative litigation is not a common practice.” However, the greatest reason seems to be that guidelines focusing on bandwidth control were created at an early date by the cooperation of the Ministry of Internal Affairs and Communications and related businesses, and the concerned parties respect them.

3. Conclusion

Net neutrality is one of the few issues in which network carriers who usually "compete" can "cooperate". Additionally, major network carriers and giant OTTs with significant influence in the ICT industry are beginning to make “cooperation” a reality, for instance, by creating new services and business models. It is clear that this cooperation is causing concern among small- and medium-sized carriers, startups, and the general consumers. However, most of the behaviors regarding which net neutrality advocates are concerned would have the risk of drastically harming the reputations of network carriers and giant OTTs (if they actually engaged in them, which they are unlikely to do). Therefore, even if these concerns become reality, this would only occur in exceptional cases, and it would seem that competition laws and consumer protection laws would be sufficient to handle these if such cases occur. In this case, a comparison between the U.S., Europe, and Japan shows that Japan’s response has been the most composed and reasonable.