

Summary of Minutes of the Fifth Round Table Conference on the Neutrality of Networks

1 Date and time: March 14 (Wed), 2007, 10:30 to 12:50

2 Location: Special Conference Room No.1, 8F, Ministry of Internal Affairs and Communications

3 Attendees:

(1) Members (Honorifics omitted)

Hiroshi Esaki, Kiyohisa Ohta, Yoshinori Sakai (Deputy Chairman), Minoru Sugaya, Nobuko Takahashi, Motohiro Tsuchiya, Masayuki Funada, Toshihiro Matsumura, Hiroyuki Morikawa

(2) Observers

ACCESS Co., Ltd., Apple Inc., Internet Initiative Japan Inc. (IIJ), Intel Corporation, INFOCITY, Inc., KDDI Corporation, J-Stream Inc., SOFTBANK TELECOM Corp., D4DR Inc., TELECOM SERVICES ASSOCIATION, Japan Internet Providers Association, Nippon Television Network Corporation, Nippon Telegraph and Telephone Corporation (NTT), Fujitsu Limited, Microsoft Corporation, Mobile Content Forum (MCF), Yahoo Japan Corporation, USEN Corporation

(3) Ministry of Internal Affairs and Communications

Mori (Director-General of the Telecommunications Bureau), Taniwaki (Director of the Tariff Division), Ninomiya (Senior Planning Officer of the Tariff Division), Samura (Director of the General Affairs Division), Suzuki (Director of the Telecommunications Policy Division), Ohashi (Director of the Computer Communications Division), Watanabe (Director of the Telecommunications Systems Division), Imagawa (Senior Planning Officer of the Telecommunications Policy Division)

4 Agenda

(1) Presentation 4 (first half) by Round Table Conference observers

[Okinaka, Vice President, KDDI Corporation] (Document 5-3)

- The difference between the Internet and NGN is that the Internet is an open network formed by the individual IP networks connected to it. It is a best-effort type transport in end-to-end communication, QoS is not secured, and security and certification are assumed on the application (terminal) side, not on the Internet side. On the other hand, NGN is the network that carriers use IP-based technology to construct with the goal of replacing legacy networks, and QoS and security for the carriers' networks are secured on the network side. Yet, an IP-based network processes not only telephony, but also multimedia services. It will not absorb

the Internet, but be complementary to it.

- The fairness of the use of networks and the fairness of cost sharing are issues to be discussed within the Internet. We regard the openness between layers as points of contention for NGN.
- The problem about the fairness of the use of networks is that certain traffic, such as rich content and P2P, take over network resources, but it has not gone on long enough for uniform rules to be established in the system. The Internet is a best-effort network, but with the background of the competitive environment, ISPs and carriers are now trying to secure network capacity to meet the demand. This direction will not change.
- The fairness of network cost sharing involves two problems. First, as to cost sharing between ISPs, competition exists in the selection of upper ISPs as viewed from lower ISPs. While upper ISPs may collect the cost for improvements by controlling the connection fees from content providers and those from lower ISPs, lower ISPs may not expect any increase in income, since the rates for end users are fixed, and thus absorption of increased costs can only be expected through technical innovation. Whether or not network improvement costs can be collected through technical innovation cannot be determined, however, since it is difficult to forecast the traffic trend in the future.
- NGN cannot realize opening between layers to only the extent whereby the concept of managed networks is maintained, since the carriers will secure QoS for NGN.

[Iwanami, Representative Director, INFOCITY, Inc.] (Document 5-4)

- The time has come when networks are disseminated, content services have increased and use will further explode.
- As service models in communication networks, there are “content services,” which involves content providers, and “user-involved services,” in which users appear as the creators of the content value, in addition to the existing and traditional “communication services (phone calls and data communications). Users have changed from mere one-sided users to information transmitters and creators of content value. In addition, in the case of P2P networks, users are constituents of the networks per se as well as their users.
- A killer application in the “user era” is one that has succeeded in exhibiting network externality in terms of users — i.e., the greater use is generated by the synergy effect. Thus, winning users as early as possible will lead to the creation of enduring value.
- iTunes+iTunes+iPod of Apple Inc. is a good example of new network-based applications that embody software existing beyond a single device.
- The application development procedure in the user era is to place the product on the market initially to develop its use. The use will then increase and lead to a fixed model, and the product will then be put under development on a business basis. If the use increases

accompanied by the effect of its use on the network, the victory of the business will be realized. In this case, for providers other than those with extreme viability, it is too late for them to enter the market after the business model is found. Upon detecting the value for users, it is important to ask users about the new application as early as possible to develop and place the product on the market.

- In discussing the neutrality of networks, it is necessary to study the rules intended to secure an environment of free innovation. It is important for technical innovations to be accomplished without any permission from anyone and be put on the market. Today, where the user environment has improved, "Innovation without Permission" is the foremost issue from the viewpoint of international competitiveness.
- It is also necessary to study rules intended to realize an innovation environment with no gap with the overseas world. In the network era, applications can be provided regardless of borders. Therefore, under the circumstances where prior permission, including copyrights, is being required in Japan while it is not in other countries, no new killer applications can appear from Japan.
- Furthermore, it is necessary to study rules that meet the necessities of the user era. It is essential to consider rules that will not deprive users of options by considering the big change of users per se. We must avoid, as much as possible, cases where fair competition is hampered under the name of user protection. From this point of view establishing rules such as "users' charter for use" may be required.

[Kishihara, Secretary General, Mobile Content Forum] (Document 5-5)

- The mobile content-related market has been expanding rapidly, growing to be a market of over ¥700 billion in 2005. Among the mobile commerce, auctions and shares (transaction-related) have made remarkable growth. The use of cellular phones has changed to a model in which users are mutually providing information.
- Vertically-integrated business models are the most developed in the area of cellular phones. The fact that the said business model was adopted is a factor in the rapid growth of commerce. It is true that the vertically-integrated type is superior in the optimization of content, portals and terminals, the construction of services with high usability and the early construction of business models. A market as large as ¥700 billion, however, requires subsequent development.
- As for the fairness in the use of networks, the vertically-integrated business model has been effective in promoting rapid growth, but each of the layers is in an oligopolistic state. Lower layers are in a superior position to move on to upper layers, although it is not necessarily appropriate to say so since the content services include various services. How the neutrality is

maintained in the business model of upper layers is important. A policy is needed that allows users to enjoy the merits of competition between providers, with neutrality as the premise, so that a fair competition environment can be ensured among providers in each layer.

- We must distinguish between 1) fairness among providers in upper layers and lower layers; and 2) fairness among providers of upper layers when lower layers provide services to upper layers.
- As for the fairness among providers of upper layers and lower layers, the fairness should be unconditionally secured from the viewpoint of fair competition when the lower layer is in the monopolistic or oligopolistic state. The point in the fairness among upper layer providers is that the fairness is to be secured based on a fair policy—for example, when it is necessary to define policies to limit the use when any damage is done to lower layers.
- As for the fairness in cost sharing of networks, users had incurred the cost of infrastructure reinforcement when communication rates were metered. However, things have changed, as communication rates are now charged on a fixed basis, which made it impossible to shift costs to users. It is necessary to consider the optimum sharing of network costs since the same platform is being used, but we should study the matter from both points of view considering that things may change the other way around.
- Now, cellular phones mainly cooperate with fixed networks, media and ITS due to the fact that cellular phones are the IT terminals to have at hand. In using platforms, the brand function, promotion function and navigation function are required in addition to an application for certification system charging. To ensure the openness of the platform function, it is necessary to open information for identification (user ID).
- This is not immediately related to neutrality, but in constructing business models, users may feel assured to use vertically-integrated type services that can be provided through the brand of reliable communication providers, but responsibilities are currently shifted to communication providers for all cellular phone content. For example, the filtering service is provided with a view to protect minors from harmful sites, but users do not have any choice. This is because the responsibilities for content layers are not separated from communication providers. Communication providers, content providers and users must share responsibilities.

[Main discussions]

(KDDI)

As for the filtering service pointed out at the end of the presentation by MCF, we are expected to provide a blacklist approach for eliminating particular categories by the end of 2007.

(Microsoft)

KDDI pointed out that ISPs who hold content providers have chances to collect fees while ISPs on the access network side cannot. However, in large-scale CDNs, providers have their own AS (Autonomous System) through which multiform provisions are available. In such cases, it would be as pointed out if upper ISPs and lower ISPs are in a free peering agreement. In cases where a content provider itself has an AS and it has entered into both a transit contract and free-peering agreement, however, the content provider will transit from the lower ISP in order to deliver content to the lower ISP unless the lower ISP does not receive any peering request from the content provider. Thus, the lower ISP may have chances to collect fees. I do not think it should necessarily be regarded as unfair as pointed out, since many of the ISPs think it is an added value for the service on the access network to provide users with smooth access to the content, as they are receiving free-peering agreements from content providers.

(KDDI)

You are right for the case you pointed out. Leading content providers are doing so, but not necessarily all of them. Actually, there are cases of unsuccessful collection.

(Microsoft)

It is only in the case of networks that generate large-scale traffic that the problem of cost sharing is suffered in the neutrality of networks. If limited to such content providers, they have sufficient economic incentives to have their own AS.

(Member)

Content providers vary in types. We must think of the fact that some types of them do much streaming bundled with ISPs. It is technically solvable, but not organized well as a business. In relation to this, I would say that the services that emerged in the provider-based and carrier-based forms could not succeed before one million people tried them. On the contrary, services in which all ISPs are dot-printed have been tried to successfully draw out CDN. It was a success, since both the possibilities had been provided. What matters is how to secure the neutrality in successful cases. It is important not to place restrictions at the starting point.

(Member)

Related to the discussion on the opening of NGN on page 10 of the KDDI material, I do not think there are so many cases where network control by carriers is impeded. For example, what sort of cases can you assume? In addition, I roughly regard NGN as certifications and QoS. I would like to confirm whether the opening of the certification user ID mentioned in the request by MCF falls under the impediment of network control by carriers, if viewed from the point of certification.

(KDDI)

As for impediment cases, actually nothing in particular has occurred yet. The ISP side requested us to disclose all interfaces between the service stratum and

transport stratum upon starting the discussion on NGN, but they did not mention what they specifically wanted to do. To release all transports, it may happen that QoS cannot be secured. SDP (Service Delivery Platform) is based on the idea of preparing a menu to prevent something from occurring. Next, as for certification user ID, no discussion has been conducted as to whether NGN is to be disclosed or not. I remember that we once discussed the same for cellular phones. The discussion covered whether user ID could be unconditionally disclosed, even if it is not immediately related to personal information. This needs to be reviewed also from the aspect of personal information.

(Member)

Then all that is needed is to design NGN so that no conflict will occur. NGN per se is still not clear, but it may be possible if both of us carry out discussions on it from now on.

(KDDI)

We can determine whether you are requesting disclosure by your mentioning that there are so and so cases, but it is difficult if you request everything without giving us any concrete examples.

(Telecom Services Association)

We agree on the viewpoint of securing network certification from the aspect of QoS and security. As for detailed requests, we will examine specific application examples at the NGN liaison meetings. Let us discuss the matters revealed at such places of examination.

(Member)

Have things not already developed as far as concrete ID disclosure?

(Telecom Services Associations)

Not thus far, but we wish to discuss such issues in the future.

(Softbank Telecom)

We do not necessarily agree with the way KDDI thinks about NGN. Transport layers and service layers may be separated. It is necessary to construct the foundations for various things to occur. It seems necessary to secure possibilities such as enabling services by using various transports on a SIP server.

(JAIPA)

I have a question on the latter half of the Microsoft comment. It meant that lower ISPs may have chances to get transit to content providers if they do not make free peering with content providers and CDNs. However, traffic comes even if no peering is made, since it is the Internet, and they cannot help receiving traffic if they get

claims from the users of lower providers that they cannot see content. There are more than 1,000 secondary providers in Japan, and it is impossible to find transit from the content provider side for all of them. We recognize that even though it is technically possible, problems actually exist between upper and lower providers.

(Microsoft)

We have been talking based on the recognition that upper ISPs and lower ISPs are independent providers, but is one contention not that upper ISPs are superior to lower ISPs?

(JAIPA)

Yes, that is correct.

(Microsoft)

Surely, there is room for further discussion as to whether there is any chance for lower ISPs to receive transit fees. However, it seems that no range is determined for services to be provided as an obligation since the Internet connection service is contractually the best-effort type.

(JAIPA)

It is not true that no end-user obligation exists. It is doubtful whether content providers are to be blocked from particular content. Such cases exist in the United States, but we find none in Japan.

(Microsoft)

Shaping and discriminatory handling appear unfavorable under the Telecommunication Business Law, but insufficient band coverage is a routine problem. Under such circumstances, it seems that providers are under no obligation to accept free peering.

(JAIPA)

That is correct.

(USEN)

From two points of view, there seems to be no reason to continue discussing the matter. The first point is that P2P occupies 90% of the traffic. Too much emphasis is placed on traffic because of the term "rich content," but, actually, P2P traffic is greater in amount. The second point is that discussion has been going on to make lower ISPs on the provider side share the network costs. However, lower providers are providing the service to connect to the Internet and it is their inherent service to secure transit and lines. Discussion to shift the cost of inherent services to other providers sounds peculiar. From the aspects of inherent services and inherent costs to be paid, this discussion does not make sense.

(Member)

The percentage of P2P traffic may have changed and not be 90% anymore, only no current data has appeared. For example, traffic for international exclusive lines has changed. The problem is that this does not appear on the surface. What matters is that misunderstandings happen. Basic data needs to be collected in order to ensure neutrality. It is essential for the Government to be able to collect reliable information from providers.

(Institute for Hyper Network Society)

It would be difficult if no data existed on the chronological changes of traffic. Data including I X must be provided. In addition, management data should be reported if costs are to be shifted to others. I agree with the comment in the INFOCITY presentation about being on the viewpoint of the user side. I basically agree with the "users' charter for use," but let me add that an international venue to discuss the bill of rights called "Internet Bill of Rights" exists in the Internet Governance Forum, and that we must discuss the matter not only domestically but also from the global point of view. It is important to confirm the philosophy or principle, whichever is needed, when viewed from users.

(Member)

I have a question for MCF. Although content can be competitive if provided exclusively, it now seems that the same service can be received from any carrier. I think it may be difficult to be competitive via content alone. What is the power relationship between cellular operators and content providers?

(MCF)

It may go against the Anti-Trust Law to tell other carriers not to provide content. What matters more is that it differs from personal computers in that permission is required from communication providers when content providers launch various business models. It was a success from the point that the quality of content can be maintained at a given level as a merit of the vertically-integrated type services, but we think it would be better if more freedom is ensured for this at the time users transmit information. As for the power relationship, labels are stronger for musical content. The power relationship is expected to keep on changing, but, at present, licensing is required from communication providers and content providers are receiving permission.

(Member)

Users tended to use DoCoMo if they wanted to use i-mode in the past. However, will the time when users are attracted to cellular phones and choose them by their

content end if other providers provide similar services, or will it continue? Does content have the power to define cellular phone services?

(MCF)

Users choose carriers based on the aspects of communication rates and terminal design, according to a survey conducted by MCF, and differentiated content then follows. Content cannot be differentiated, since other carriers will provide the same services once they prevail. Content per se is one of the options among which users choose. Content providers want to provide services on a multi platform, and thus we think it would be difficult to make it an ongoing differentiation factor.

(Member)

Page 7 of the MCF's material pointed out that fairness must be secured unconditionally also from the viewpoint of fair competition when lower layers are in an exclusive or oligopolistic state. I would like to know if any concrete problems exist in the cellular phone market.

(MCF)

For example, access is treated favorably if the same service is provided by access via a menu or the API (Application Programming Interface) is restricted. It says that applications should be provided as desired, but cellular phones require verification and acknowledgment when providing applications. Initially it was because there were problems of network loads and personal information in terminals, but it has now been determined that applications will be permitted at the discretion of communication providers. In reality, permission will not be given in some cases, which may affect the business model.

(KDDI)

Discussion is being conducted for content alone, but it is necessary to consider content and applications in a set for the walled-garden models so far. Since applications are embedded in cellular phone terminals, individual operators will prepare them for themselves. Then, by using them, content providers develop content with those ideas incorporated in them. That applications may differ by cellular phone operator cannot be helped and, conversely, that constitutes a source of competition. Yet, we have incorporated those of the open Internet type since last year and we see traffic flowing this way. It seems that existing models tend to weaken slightly.

(2) Presentation 4 (latter half) by Round Table Conference observers

[Fujita, Policy Planning Manager, Apple Inc.] (Document 5-6)

- We are basically on the same standpoint as Yahoo and Google. We cannot agree that the equal and fair competition environment will be hampered through intervention in the network market.
- iTunes is the largest digital content service that is still in the course of development, and thus its legal promotion of literary work distribution may be hampered if restrictions are imposed on the network. Is it necessary to have the same discussion in Japan, where legal distribution service is still immature, as that in the United States? (We do need discussions on YouTube, etc.)
- For providers who constitute the content layer, such as Google and us, communication providers are huge entities, and there is an imbalance in competitive power. Communication providers are providing multi-media services. Communication service is a licensed business, but we and Google are striving in a free-competition market. We are afraid that fair competition cannot be maintained if communication providers enter other layers. Actually, all providers engage in services that compete with iTunes. If this is neglected, it can be assumed that a huge layer entering other layers will easily gain an edge in competition.
- As a similar example, there are both a case where Netscape Navigator could not maintain fair competition in the bundling of browsers by a provider who has almost dominated the OS service, and a case where an existing airline company reduced its price in the time zone in which it was competing with a new company. In this case, the new company was driven into financial difficulties.
- In Silicon Valley, where the head office of Apple Inc. is located, there are many people that bring new business from within the United States and abroad. In Japan, most services are of the e-commerce type and not innovative. Since networks cross borders, it seems that Japan may generate good industries in this field due to the fact that it has the second-best infrastructure environment following South Korea.
- As for the free-rider theory, the problem was that providers could not estimate the demand, but pricing is an essential factor in every business. Communication providers have already imposed fair share on consumers. Nevertheless, if the operation did not work well, it seemed that there were problems in the pricing mechanism and initial business plan development.
- The Internet is an open and neutral system. It is not appropriate to intervene in it.

[Tsuchiya, Executive Director, Second Nippon Television Business Headquarters, Nippon Television Network Corporation] (Document 5-7)

- We run Second Nippon Television through our own server and flatter ourselves that we are the most active of all key stations in Tokyo.
- We are providing original content, terrestrial broadcasting-linked content, original news videos, posting videos and so on. Our business model is based on both distribution that is free with advertisement and paid distribution. Users will subscribe for membership. Our system works with free membership, but video that is accessible without subscription is increasing.
- Major content includes those that introduce databased regular terrestrial programs (charge-free), paid original content, regular real-time news, complete versions of press interviews, past news, and sports programs. As television drama home pages are accessed more and more recently, we are providing drama-making videos and the like.
- The number of replays is showing geometrical growth if three to five times the number of replays now over the same period last year. After April of this year, a greater increase over last year is expected since various new projects and programs will start.
- To tell you the current status and issues of TV stations promoting net services, broadcast content of TV stations has just started to develop on networks and it seems that more and more broadcast content will be appearing on networks. It is thus necessary to tackle the matter from the planning stage to decide how to develop broadcast content on networks and on terrestrial waves. Furthermore, the forming of a consensus among related industries toward creating new markets is an urgent issue. Japanese broadcast content can now be enjoyed via YouTube, but the state where you find no normal versions, but only pirated copies, must be eliminated.
- We need to vitalize the content market and then discuss the neutrality. While television content has been created for domestic use, marketing abroad should be brought into perspective by utilizing the characteristics of the Internet, which crosses borders. Currently, Japanese videos and games are attracting global attention, and I believe that Japanese TV content will also gain attention.
- BBC has announced its global development in partnership with YouTube, and again announced that it would develop services called iPlayer through which TV content can be enjoyed over the Internet. At the time, BBC commented that it would “distribute splendid content from the UK all over the world”. I think Japan should distribute broadcast content to the world as well.
- TV station content is at a higher level due to the integrated hardware and software.

We want to release such content to the world by using the Internet. It is necessary to think of content distribution in three factors—technology, business and expression.

[Main discussion]

(D4DR)

I have a question for Apple. In developing the iTunes business, did you see that Japan was a favorable network environment as a market? Did you see the Japanese market as being under a favorable condition compared to other countries?

(Apple)

We are developing iTunes in 22 countries around the world. The first was the United States, and Japan is the 20th. If compared based on GDP, Japan might have been earlier. Europe, where we developed iTunes earlier than in Japan, is under a worse network environment with the smaller market. Why we were late for Japan is that it took time to deal with copyrights (negotiations with labels). The price is 99 cents (approx. ¥117) in the United States and ¥150 and ¥200 in Japan. The price is higher for Japan, but this is the outcome of our negotiation with the labels. If the price is too high, it will be less attractive to users and they will move to P2P. This pricing, as if Japanese content was superior to that of the United States, made American content holders complain.

(D4DR)

Didn't you have any problem on the network side in developing business in Japan?

(Apple)

Both price and speed in Japan are superior to those in the United States. We find nothing to complain about in the infrastructural aspect.

(D4DR)

Is there any country with which you felt dissatisfaction?

(Apple)

Countries other than Japan, the United States and South Korea are found in a group. We find no extremely bad countries out of 22.

(D4DR)

Is it difficult to enter the countries with poor infrastructure?

(Apple)

That's true, and another matter is purchasing power. If we try to sell American music in developing countries, we must lower the price of the content, but then the content holders will not say yes.

(Microsoft)

Nippon Television pointed out an important matter. That no content has been brought out abroad is a significant problem. Also pointed out was that the traffic of rich media such as Streaming Media cannot be ignored in international leased lines. Clips of Japanese TV wide shows are distributed via YouTube in the United States, which makes the traffic tight. If these were distributed in Japan by Japanese TV stations, no infrastructural costs would be incurred. Treatment of copyrights in Japan being indecisive has caused distortion in the infrastructure. Recently, we heard of a judicial trial where invited television and Japanese television can be watched from outside Japan through location-free rental services. Those gaining profits are equipment manufacturers and service providers, while no income comes to production companies and TV stations, which requires urgent review. In addition, it is important that official content be provided on networks. Another point is that we should carry out discussion by distinguishing between bundling and abuse of preferential position to see which is unfavorable. Many people have become biased since the Netscape case underwent judicial trial and now regard bundling as unfavorable. However, it is true that the Internet has penetrated thanks to bundling and, looking at the state of other companies, bundling a browser with the OS was not a mistake. "Innovation without Permission" is important, even for a player who has an exclusive position in a layer. When providing any service in a new layer, "Innovation without Permission" must be respected, even if the player has an exclusive position in a particular layer. However, it is important to strictly monitor abuses of preferential position within the framework of the Anti-Trust Law and accumulate judicial precedents. In addition, there are cases where players cannot succeed even if they have power in particular layers (Our company maintains a high position regarding OS, but it has a lower share in the music distribution field. The same goes for the telephone companies who provide the music distribution service.) It is essential that "Innovation without Permission" be ensured even for players who have power in particular layers so far as the fairness of competition conditions are being ensured.

(Member)

What is the age structure of the members of Second Nippon Television?

(Nippon Television)

Many are males in their thirties, but the attributes of content viewers are close to those of the viewers of television.

(Member)

What is the main reason for adopting the membership system?

(Nippon Television)

The characteristics of television are that we cannot see who the viewers are. When distributing video on a network, one model is that new advertisement can be developed through understanding their attributes (attribute distribution). Yet, we also made news available to non-members, while we have increased the amount of video that is available to non-members, since the hurdle for member subscription was higher than we expected.

(Member)

Do you mean that personal information is what creates the high hurdle for member subscription?

(Nippon Television)

Not going as far as personal information, we just ask members to enter their mail addresses. The hurdle is high for them to register their gender, zip code, and mail address. Thus, we have now established tiers (e.g., a tier for premium channels that are only available to members) while increasing those that are also available to non-members.

(Member)

If free advertisement belongs to attribute distribution like GyaO, what is the proportion between free advertisement and paid distribution in the business model? What is your goal for the proportion between paid and free distribution?

(Nippon Television)

There is almost no paid distribution. All is distributed free of charge, except that up to 100 items per month of some content is made available as desired at ¥500. If we provide both paid and free distribution on the site, it is regarded as a paid site. The hurdle is high to pay for killer content on networks. Currently we are conducting trials using this content. We provide paid distribution in various forms covered by the paid portion of Yahoo and Nifty. In terms of technologies, business models and expressions, we, a television content provider, are distributing content including killer content on a paid basis to provide some different forms of expression, but now we find it quite tough. We believe that a paid model can be possible through continued efforts since we became familiar with money exchange on networks such as iTunes. In the case of our company, we actually feel that the co-existence of paid and free content constitutes the bottleneck.

(Member)

You said you provide almost all content free of charge now. Are you sure you will be

able to maintain this in the future?

(Nippon Television)

For the present, we are suffering in the red, and thus we are seeking some solution. We have been playing in the domestic market alone. So, if we move into the global market, we may be able to solicit advertisements — that is a creation of a global long-tail market. We must try, since the level of Japanese content is high.

(Member)

What is the proportion between originals and archives? Do you make any distinction between paid and free content?

(Nippon Television)

For example, we distributed on a network what we cannot provide on television, and the traffic increased more than usual. It is one way to cooperate with television. What BBC is doing is to make users see what they missed. It seems to show that what enables users to see what they missed is the immediate demand by users rather than archives. Then archives will be utilized more when past broadcasting programs are retrieved.

(Member)

Is it correct for us to understand that you first promote distribution of content, since it is still far from a business and you are not yet considering its impact on the traffic? We think that the matters of copyrights and program making per se are more significant than network-related matters as impediments. However, you do not seem to consider that in developing the service on networks, do you?

(Nippon Television)

I think traffic will appear if TV stations release content, but now we are still at an initial stage. Impediments come up in the discussions in the related industries, but we recognize that they are also at an initial stage.

(Member)

I would like to ask KDDI and NTT if it is permissible to say that NGN includes mobiles as well.

(NTT)

We place them in the scope in the world of standardization. First, what we are starting is fixed networks. The study of how to develop the relationship with mobiles in a practical manner is an upcoming issue. We have yet to make any concrete plan.

(KDDI)

It is the same with NTT. We include mobiles as a final goal, but for the moment, the emphasis is on fixed networks.

(Member)

I know it is extreme logic, but is it impossible to think of the NGN that we are now talking about as a type of ISP provided by communication operators?

(KDDI)

It depends on the definition of ISP, but NGN is not an ISP when we say that it is a service for providing Internet connection.

(Member)

What is the difference?

(KDDI)

It is different in that operators secure security and QoS on the network side in the case of NGN, while the terminal side is responsible for the same in the case of the Internet.

(Member)

NGN will largely change from the current Internet in the roles assumed by the terminal side and the network side. Furthermore, the way the content layer business is carried out will change. When that happens, will the roles to be assumed by network owners increase compared with the world of the Internet?

(NTT)

NGN is a managed network that differs from the Internet in the models of quality and rate. We intend to provide the Internet access function even in the time of NGN. Since various forms of networks have appeared accompanied by suitable new models when viewing from the content and application sides, we feel it is more a question of how users will choose among them.

(Member)

When thinking from an industrial aspect, some types of businesses will become relatively tough due to technical innovation in their time, and some others will make new development. Having listened to the presentations given so far, I find that all of them are based on the assumption that they will keep their business models going. It seems that the major frame of what neutrality should be in the Internet and NGN is difficult to form. I would like to ask one more question. Will independent ISPs be driven out when NGN prevails?

(KDDI)

We have never thought that NGN would absorb the current Internet. We feel that it is a separate world in a sense. Should the discussion not be whether ISPs will be eliminated regardless of NGN?

(IIJ)

NGN and the Internet will evolve separately by following separate steps. The Internet has been developing its services to meet the needs of users. We believe that NGN and the Internet will keep on growing according to the needs of users for the moment.

(Institute for Hyper Network Society)

I hope so in general. In reality, dominant players invest in NGN, while they do not in the Internet because the Internet does not bring profit to them. Inexpensive and faster lines could be achieved if investment is made in the Internet, but we see no such players appearing. There is a concern that the problems that the users have in countries where broadband has not penetrated will be ours in the future.

(Member)

The concern may exist, but some who work on other procedures also exist. It is important for such procedures to appear, but it would be unfavorable if they became mandatory. The neutrality of networks indeed makes a mechanism that allows new challenges, so it would be better to realize "Innovation without Permission" without putting a frame in place.

(NTT)

We will proceed as in checking the movement of users, since investment may not be collected unless there are users.

(Institute for Hyper Network Society)

We know several cases where investment results were total failures, and I hope such cases will never be repeated. We will learn lessons together through "Innovation without Permission".

(NTT)

The future is unpredictable. We cannot help repeating failures. To intend something else is for another discussion.

(Institute for Hyper Network Society)

Japan has widely secured the openness of access. As viewed from NTT, resistance to ADSL was seen, but it resulted in gains for all. Some say that they cannot afford to provide optical services to competitors at a lower cost, since it is a new investment. The concern will become reality if the division of legacy rights and new investments was inverted.

(Member)

As for the relationship between NGN and the Internet, both access systems will mostly use the NTT transmission channels and users will use the cheaper of the two. They may use NGN if it is cheaper and of better quality.

(ACCESS)

It is as we asserted in our presentation. The stratum of both transports and NGN services must definitely be separated and made open for further development of the ICT industry. In this regard, many members and observers have so far expressed concerns about the existence of backward movements. On the other hand, some said that both the stratum are indivisible for securing QoS. I would ask the members to make further and full discussion on the separation and opening of layers and stratum and fully include the outcomes in the report.

End