

## Summary of Minutes of the 93rd Interconnection Committee Meeting

Date and Time: Monday, June 11, 2007, 16:30 to 19:00

Location: Conference Room 1001

Attendees:

Interconnection Committee

Mr. Toukai, Committee Chair; Mr. Sakai, Deputy Chair; Mr. Aida, committee member; Mr. Sato, committee member; and Mr. Naoe, committee member

MIC

Mr. Sakurai, Director-General of the Telecommunications Business Department; Mr. Taniwaki, Director of the Tariff Division; Mr. Ninomiya, Senior Planning Officer of the Tariff Division; Mr. Katagiri, Deputy Director of the Tariff Division; Mr. Shirai, Deputy Director of the Tariff Division; Mr. Yokote, Deputy Director of the Tariff Division; and Secretary

[Discussion Details]

1. Partial Amendment to the Regulations for Enforcement of the Telecommunications Business Law, Etc.

(Mr. Sato, committee member)

I have no objection to the basic concept.

(Mr. Naoe, committee member)

Is it right that settlement will not be conducted for the year, but will be reflected in the interconnection charges of the following calculation period?

(MIC)

Exactly.

(Mr. Sato, committee member)

Does it reduce the risks of interconnection charge collection?

(MIC)

Yes, it does.

(Mr. Toukai, Committee Chair)

Ex-post settlement processes past interconnection charges, and the adjustment amount is reflected in the costs for the year. From the accounting perspective, that is a crucial point. We should respect this basic principle.

(Mr. Sakai, Committee Deputy Chair)

Is the adjustment amount included in the following year's interconnection cost only when the discrepancy is above a certain amount, or is 100% of the discrepancy calculated?

(MIC)

The discrepancy is calculated at 100%.

(Mr. Naoe, committee member)

I suppose the discrepancy will be divided when the amount is too large.

(MIC)

It is possible to spread the amount to be processed over multiple years. The decision is left entirely to NTT East and West.

(Mr. Sato, committee member)

Is the estimated adjustment amount available?

(MIC)

For the most recent year, the amount settled with time lag was over 2 billion yen. As the entire amount is tens of billions of yen, its proportion is not so large.

## 2. How Interconnection Charges Should be Calculated in and after FY2008

(Mr. Toukai, Committee Chair)

Although there are six issues, we should focus on these four points at this time: (1) evaluation of the new LRIC model, (2) handling of values used in interconnection charge calculation, (3) handling of gaps in the interconnection charges between East and West, and (4) the new model of interconnection charge calculation after the applicable period.

(Mr. Aida, committee member)

In the case of an eight-month forecast, for example, is the traffic fluctuation for six months added to the discrepancy from the traffic in the applicable period?

(MIC)

That is correct.

(Mr. Sakai, Committee Deputy Chair)

How can the figures on Pages 21 and 22 of Reference 2-2 be compared to the ideal value, that is,

the actual traffic for the year?

(Mr. Aida, committee member)

Please provide us specific figures to see if the discrepancy is negative or positive.

(MIC)

We will consider your comment and prepare the data by the next meeting.

(Mr. Aida, committee member)

If the interconnection charges vary depending on whether the call recipient is using IP-based network or PSTN (Public Switched Telephone Network), is it acceptable for an interconnection provider to pay the interconnection charge for either of the two parties at the point of interface? There will be no problem if the interconnection charges are unified, but if not, that must be clarified.

(MIC)

Currently, a user calls a 0AB-J number and pays the interconnection charge that is decided by whether the call recipient is a user of PSTN provided by NTT East or West or a user of IP telephony. The provider of the calling party has no choice over the interconnection charge structure of the call recipient. In reality, however, the interconnection charges for IP telephony using 0AB-J numbers resemble those of PSTN.

(Mr. Sakai, Committee Deputy Chair)

Strictly speaking, we should discuss the interconnection charges for calls made to IP networks including NGN (Next-Generation Network) before discussing its relationship to the charges for interconnection with PSTN; otherwise, the discussion will not make any sense.

(Mr. Aida, committee member)

Under the current 0AB-J number system, the provider cannot tell whether the call recipient is using PSTN or IP telephony before reaching the switching facilities of the call recipient. I therefore think that, under the current system, there seems to be no room for the calling party to determine how the call will be interconnected.

(Mr. Naoe, committee member)

Regarding Page 1 of Reference 2-1, the two issues related to the new model that NTT East and West pointed out have already been discussed. However, considering that PSTN will be included in the data within two to three years, there should be a shift from the conventional concept. Otherwise, the PSTN used in the model will lose touch with the reality. It may be possible to discuss the ideals of the network when studying a new model or method for interconnection charge calculation. It may also be possible to calculate the charge based only on the traffic data.

Some people pointed out that the actual cost will approximate LRIC in the future, but that is unlikely. It never will, particularly for the portion related to the switching node.

(Mr. Sakai, Committee Deputy Chair)

For example, when all of the traffic becomes IP-based, it may be possible to implement IP-based facilities and calculate the charges accordingly. In one sense, that can be an LRIC model for NGN.

(Mr. Naoe, committee member)

When NGN is realized, voice traffic will be the most highly prioritized, and it is highly likely that the node and switching network will be designed to that end. Meanwhile, how much it raises the cost will be an issue.

(Mr. Aida, committee member)

How much investment is needed to ensure the same reliability level as PSTN? It seems difficult to realize it with little investment.

(Mr. Sakai, Committee Deputy Chair)

Currently, IP telephony is provided to broadband subscribers. We need to discuss how to handle people who do not subscribe to broadband services.

(Mr. Sato, committee member)

About the issues on Page 2 of Reference 2-1, the LRIC Study Group has already modified the nodes. I understand that the question is whether it should be used in calculating the costs for the interconnection charges. If no new findings or concepts will arise in the future, no further modification is required. Other issues differ from those of the study group. There is even the perspective that the interconnection charges can be reduced if the actual cost method is adopted. However, we cannot support the idea of adopting the actual cost method just because it reduces the charges, with no logic behind it. Therefore, a consensus must be reached on adopting the modified model for some years to come.

(Mr. Aida, committee member)

Some providers actually demand adoption of the actual cost method separately for specific matters, such as PHS base station lines.

(Mr. Sato, committee member)

It is not logical to adopt the actual cost method just because of the lower charges. If the actual cost method reduces the charges, we need to examine whether the model has some problems.

(Mr. Naoe, committee member)

When I discussed LRIC models in the 1980s with the US and UK counterparts, some people

thought it was possible to reduce costs below the model cost through management efforts, and provide the differential as bonus.

(Mr. Sato, committee member)

We need to further verify which is more realistic, the actual cost method or the LRIC model. We also need to ask NTT East and West to provide the necessary data.

(Mr. Toukai, Committee Chair)

The situation has drastically changed since the LRIC method was launched. The mission at the time was to reduce the interconnection charges, and the LRIC model was expected to improve efficiency, but that seems almost over. The last and present LRIC modifications do not necessarily focus on PSTN, and have not necessarily ignored the direction toward IP-based networks. On the other hand, in considering whether the conventional methods may work well for the next five to six years, the current method does not seem viable. The focus on PSTN in terms of the interconnection charges is largely due to the bottleneck issue. We cannot have any viable discussion unless we determine the extent to which people understand the bottleneck issue as IP-based networks develop. In the meantime, the charges of the actual cost method are lower than in the model because of depreciation. The assumption of the model is to build new networks, and extension of the depreciation period will have no impact because the facilities are used for a longer period than the expected lifetime. For this reason, the charge for the LRIC model will never be lower than that of the actual cost method. If we do not note this fact, our future discussion will fail.

(Mr. Sato, committee member)

We need to discuss the surrounding issues as well as the interconnection charges.

(Mr. Naoe, committee member)

Whether we see any types of interconnection between different telephone systems, such as PSTN, IP telephony using 0AB-J numbers, and IP telephony using 050-prefix numbers, as the same or differentiate each type is very decisive.

(Mr. Aida, committee member)

Currently, SIP (Session Initiation Protocol) server capacity is insufficient, and designing IP telephony to use 0AB-J numbers may not gain consensus.

(Mr. Toukai, Committee Chair)

Have any study groups under MIC made any progress on the issue of the future direction?

(MIC)

The framework of network architecture has not been established. As for NGN, studies are in a

trial and error process. We understand that we have not reached the stage where we can decide a model for when IP-based networks are fully in place.

(Mr. Aida, committee member)

Regarding NGN, discussion has just started on the relationship between NNI (Network Network Interface) and ANI (Application Network Interface). The relationship between NGN and PSTN must also be discussed. The discussion has not reached a level that allows calculation of interconnection charges.

(Mr. Sato, committee member)

In terms of handling traffic volume, as far as I can determine from today's discussion, it seems unnecessary to calculate the charges by extending the forecast period to 14 months.

(Mr. Aida, committee member)

Concerning the discrepancy, please let us know not only whether the figure is positive or negative, but also the difference between the traffic of the year and the traffic volume to be used for calculation.

(Mr. Sakai, Committee Deputy Chair)

Could you tell us why the adjustment amount cannot be used in the LRIC method?

(MIC)

The LRIC method is based on the idea that networks will be built from scratch, while the adjustment amount of the actual cost method means adding the past discrepancy in interconnection revenue to the current year's interconnection cost. We understand that, basically, these two will not fit together.

(Mr. Naoe, committee member)

The LRIC method calculates future costs, so conducting settlement with the method does not make any sense.

(Mr. Aida, committee member)

If you adopt adjustment amount, you need to coordinate the value with other parameters, which seems infeasible.

(Mr. Toukai, Committee Chair)

What about the gaps between NTT East and NTT West?

(Mr. Sato, committee member)

Supposing that separating East and West is the right direction, we need to limit the issues; for example, what are the current issues in realizing the separation and what are the required discussions. In doing so, we need to have a realistic discussion by ensuring that the concept of

NTT restructuring is maintained.

(Mr. Sakai, Committee Deputy Chair)

I believe the Interconnection Committee has never decided that having no gap between East and West is acceptable.

(Mr. Sato, committee member)

It seems that some providers do not understand the concept of universal service.

(MIC)

On Page 8 of Reference 2-1, “(1) Impact on User Charges” considers the concept of universal service, while (2) is presented from the perspective of securing fair competition.

(Mr. Sato, committee member)

If we set the gaps between East and West, we need to discuss the impact of such on the market.

(Mr. Naoe, committee member)

Generally, people think that electric bills and JR fares are pretty much like universal service. They may express strong concerns about a big gap in the charges.

(Mr. Aida, committee member)

Actually, regional gaps exist for electric bills and JR fares.

(Mr. Naoe, committee member)

However, people are not aware of the regional price gap, and I suppose they feel the same way about PSTN.

(Mr. Sato, committee member)

Since NTT East and NTT West are separate companies, setting different interconnection charges is a basic principle. If a gap of 30% should be set, they need to discuss the issue with the relevant parties, and verification is required regarding the impact on competition. However, I am not sure if we can do it right now. We may need to take time for preparation.

(Mr. Naoe, committee member)

If the gaps will be set, drastic deregulation measures may be required, just as in the case of organizing the NTS costs.

(Mr. Sato, committee member)

Even if drastic deregulation is adopted, we still need to discuss such issues as how long the period of deregulation should be. We also need to discuss whether future interconnection charges will be determined based only on access, eliminating the concept of distance. We should start such discussion or information gathering as soon as possible, not when revising the interconnection charges.

(MIC)

If you look at Pages 23 and 24 of Reference 2-2, you can see there is no gap between East and West in the actual cost method model. Please consider this when you determine whether gaps should be set between East and West.

(Mr. Sato, committee member)

No discussion has been conducted on the possible effect on the market when we set the gaps. We need to identify the possible impact on user charges as well as the difference between the impact on providers in urban areas and that on providers in rural areas from the perspective of competition. Based on such analysis, we should verify whether these impacts imply any problems.

(Mr. Naoe, committee member)

One example of user charge setting based on interconnection charge is the international call.

(Mr. Sato, committee member)

In the United States, interconnection charges differ between areas. Is it possible to say that there is a regional gap in terms of user charges?

(Mr. Naoe, committee member)

Considerable regional gaps do exist, however home telephone services are offered at fixed rates.

(Mr. Sato, committee member)

Do changes to the interconnection charges affect only local charges, or do they also affect charges for mid and long-distance calls?

(Mr. Naoe, committee member)

As far as national providers such as Softbank and KDDI are concerned, there will be no considerable impact. In the case of NTT, there will be no problem for the NTT group as a whole.

(MIC)

The holding company of NTT may not have any problem, but we need to keep in mind that NTT East and NTT West are managed as separate companies.

(Mr. Sato, committee member)

NTT West may accept the gaps between East and West, since their interconnection revenue will increase.

(MIC)

Not necessarily so. If the interconnection charges rise, the difference between the user charge and the interconnection charge as a wholesale price will become smaller.

(Mr. Aida, committee member)

Because we have the universal service fund system, setting the gaps between East and West will not have any immediate impact on NTT East and West.

(Mr. Toukai, Committee Chair)

The issue of the gaps between East and West includes how to deal with the issue and the subsidies of East and West, assuming the influences on users, the difference in stance between providers, and the adoption of the LRIC method.

(Mr. Naoe, committee member)

As for the framework of interconnection charge calculation after the applicable period of a new model, the bottom-up type LRIC is effective for settlements between providers. If this method is not adopted and providers request settlement, the regulating authority may have difficulty in determining the criteria for making any judgment. Even when a model for IP-based networks is to be designed, costing should be clarified. Actually, that is the reason why the LRIC method has been adopted.

(Mr. Sato, committee member)

In terms of PICC (Primary Interexchange Carrier Charge) on Page 30 of Reference 2-2, some of the subscriber line related portion of the interconnection charges was first set as fixed charge, and later changed to subscriber access charge. Regarding IP-based networks, it may be possible to adopt a concept other than the combination of costing and pricing.

(Mr. Toukai, Committee Chair)

The current interconnection rules have the idea of “fair and reasonable in light of appropriate costs.” That is the basis of interconnection charge calculation. When a big change is made in future discussion, we may need to discuss extensive issues including amendment of the Business Law.