Outline of Proceedings of the 4th Meeting of the Study Group on Mobile Business

1. Date and time: 13:00 to 15:00, Monday, March 19, 2007

2. Location: Conference Room 1, Ministry of Internal Affairs and Communications

3. Attendees

(1) Members (Entered in alphabetical order of last names, with honorifics omitted)

Aida, member; Fujiwara, member; Hasegawa, member; Iizuka, member; Ishiwatari, member; Izumi, Deputy Chairperson; Kita, member;

Saito, Chairperson; Sato, member; Takahashi, member

(2) Ministry of Internal Affairs and Communications

Taniguchi, Parliamentary Secretary for Internal Affairs and Communications; Mori, Director-General of the Telecommunications Bureau;

Sakurai, Director-General of the Telecommunications Business Department; Samura, Director of the General Affairs Division; Suzuki, Director of the Telecommunications Policy Division; Taniwaki, Director of the Tariff Division; Ohashi, Director of the Computer Communications Division; Watanabe, Director of the Telecommunications Systems Division; Ninomiya, Senior Planning Officer of the Tariff Division; Shirai, Assistant Director of the Tariff Division; Shibazaki, Assistant Director of the Computer Communications Division

4. Agenda

(1) Presentations by observers of the Study Group [3]

1) WILLCOM, Inc.

2) Inphonix Inc.

3) Future Mobile, Inc.

4) East Japan Railway Co.

(2) Free discussions

5. Outline of proceedings

[Presentations by relevant companies]

(Member)

There was an opinion that platforms should be open. I hear that Nokia has a platform. I wonder if Japanese manufacturers have any platforms that should be open. I hear that manufacturers do not adopt the concept of platforms, but manufacture products on an individual basis. Am I right?

(Future Mobile, Inc.)

Nokia has a platform called E60. Thus, when Smartphone is marketed on a worldwide basis, various computer programs are installed, thereby realizing uniformity of services. On the other

hand, in Japan, each individual carrier makes services uniform in their own case. To put it briefly, I think that Japanese manufacturers have platforms. This is my answer to the preceding question. DoCoMo has introduced what is known as DoJa. In the case of “au,” a platform called KCP has been introduced for the BREW framework. That is, each carrier has its own platform. Each manufacturer has to develop applications for its own platform. In South Korea, an activity called WiPi was started to make such applications uniform. I am not proposing the establishment of Japanese standards. Instead, my proposal is as follows: International standards will be complied with; an environment will be created where applications can be used openly, whether they are based on Java or BREW; and applications operating in such an environment will be certified not only by carriers, but also by third parties. I presume that if the above is realized, we will be able to conceive various services that can be provided.

(Inphonix Inc.)

We hear from carriers that they build platforms to provide the incentive to have applications developed. However, for security reasons, the latitude to open platforms is smaller than in the case of Nokia and Windows Mobile. Moreover, the basic stance is that guarantees are desired that, basically, carriers will make final decisions on whether applications will be installed.

(Member)

I hear it said that products made by Japanese manufacturers are essentially different from those manufactured by Nokia. I hear that Japanese manufacturers install new functions by modifying platforms as necessary and, therefore, such platforms are no platforms at all. Platforms are meaningful as long as they are stable. However, if a platform has to be modified each time the pertinent manufacturer adds new functions, then such a platform is meaningless. I have heard it said that Japanese platforms could neither be subject to standardization nor possibly be competitive. The purpose of the question is to ask whether real platforms can be built based on the existing ones.

(Future Mobile, Inc.)

According to the current point of view, DoCoMo started “i-mode” in 1999. On this basis, advancement was achieved in data communication, with the result that various services were carried. At present, all relevant companies are having much trouble verifying software. However, in the case of overseas manufacturers, things are open, starting with internet functions. Therefore, when any service is to be provided in this situation, such a service should be provided at the responsibility of the service provider. That is, the current situation is very troublesome in that carriers should verify all functions by guaranteeing their original specifications. I think that the above is what the preceding question points out. I said earlier that services in Japan were uniform in the case of each individual carrier. I think that in order to compete in the world, basic functions including Internet should be made open, thereby making service quality constant throughout the world. I presume that if the above is not realized, competitiveness will not be recovered. Besides, Japan is good at service technologies, and the mobile business is a field where further growth is expected to take place. Such being the case, I hope that Japan will develop competitiveness by

making their platforms open.

(Member)

I believe that W-SIMs are very effective mechanisms. Why is it that no similar mechanism appears on the scene in the case of cell phones?

(WILLCOM, Inc.)

By way of the technical aspect, PHSs feature the fact that the output power is low, with the result that terminals are very small. That is, the power consumption of PHSs is very low, and therefore, they were capable of being miniaturized before cell phones. In this regard, technical innovation is in progress. Therefore, I presume that similar mechanisms will appear on the scene eventually. In particular, I think that such mechanisms will come on the scene in foreign countries.

(Member)

Personally, I am using a W-SIM. What is the approximate ratio that W-SIMs bear to all cell phones?

(WILLCOM, Inc.)

The ratio is approximately 50 percent in the case of new contracts. As regards the cumulative value, we would like to answer after conducting an investigation on a separate basis.

(Member)

Inphonix Inc. said earlier that users should be enabled to make choices about incentives. In this regard, how should accountability be achieved? Moreover, multiple investment recovery models are expected to appear on the scene, thus causing users to have a hard time making choices. Do you think that it is necessary to standardize the rules for comparison?

(Inphonix Inc.)

The previously mentioned term, “accountability,” refers to the accountability to consumers, in fact. Furthermore, we presume that it is necessary to have monitoring performed by third-party organizations. At present, fee plans are very complicated, as was pointed out. We think that monitoring functions are required for communications in general.

(Member)

Inphonix Inc. said earlier that it was difficult to produce value added. Why is that difficult? Is it because MNOs’ platforms are not open, or is that because hardware depends on MNOs? I would appreciate it if this matter could be explained.

(Inphonix Inc.)

Please see page 5 of the reference material. The pattern is such that end users own Japanese product-like UI terminals in which dedicated customized applications are installed. In this sense, the degree of freedom for applications constitutes the source of value added. In this connection, network linkage portions such as push-type services are also required. We think that both aspects are involved as a group, resulting in value added being produced.

(Member)

Based on the preceding explanation, I cannot understand the extent to which this issue will be resolved by opening application interfaces. For example, let us suppose that push services are to be

included. Now it seems that many carriers develop application interfaces in their own way. Therefore, if such interfaces are also to be open, the resulting situation will be something close to standardization. Do you mean that such interfaces should be open on a one-to-one basis in accordance with contracts, or do you mean that standardization should be carried out? I would appreciate your explaining this matter.

(Inphonix Inc.)

Idealistically speaking, opening should be carried out by all carriers, with the result that this situation will not be limited to MVNOs and that use can be made in regard to applications. We think that this will be good from the point of view of overall growth of the industry. However, realistically speaking, we understand that such a possibility is remote. In this regard, if opening is performed based on each individual contract, it means that opening is promoted. Therefore, our answer to both of the preceding questions is “yes”.

(Member)

Page 8 of the Future Mobile, Inc. reference material makes mention of the opening of terminals. What does Future Mobile, Inc. think of the preceding discussion?

(Future Mobile, Inc.)

SMS for GSM has push functions. Therefore, in foreign countries, it is possible to make calls from servers to terminals on a push basis. In the case of Japanese carrier specifications, from the security point of view, synchronization software including Synch ML has not been open. In the United States, software like Synch ML is open. This fact is based on the philosophy that security functions should be ensured by the users themselves. The fact that SMS has push functions is one of the reasons various services could be conceived for GSM. In this respect, there seems to be the sense of getting a late start in Japan.

(Member)

I do not think that it is satisfactory if only opening is realized. One of the current problems is whether MVNOs can sit down at the negotiating table. At the same time, I think that studies can be pushed forward freely if opening is realized. What I wanted to ask was which of the following is the case: that there are too many gray zones; or that it is impossible to realize the opening because no disclosure is made?

(Future Mobile, Inc.)

For example, if an explanation is to be given by referring to page 5 of the Inphonix Inc. reference material, it follows that carriers are positioned between servers and terminals. MVNOs, which are on the side of servers, are equivalent to carriers providing services by means of relay networks. As a matter of course, the functions of MVNO-provided services are lower than those of services provided directly by means of local networks. Nevertheless, if opening is realized, there is a possibility that terminals can be operated from servers and that new services can be conceived. We proposed opening because we wanted to explain such a possibility. As mentioned on page 8 of our company’s reference material, if hardware can be controlled from applications in cell phones, there is a possibility of new services being conceived through FMC coordination. We think that in order

to be able to compete in the world, it is necessary to open such matters, thereby developing an environment where MVNOs and service providers can create new services.

(MVNO Council)

The members of this Council include a large number of CPs (Content Providers). Some enterprises disclose applications installed on cell phones, others do not, and still others pass judgment on a case-by-case basis. We think that this fact constitutes a short-term problem. We believe that what is more necessary is opening and platform development. It is necessary to be informed, for example, that such and such a platform is going to be used for the three years to come. In the absence of such information, a developer cannot obtain any firm prospect for investment recovery. In the world of PCs, companies manufacturing the platforms hold developers' meetings or the like every year to disclose technical specifications to developers. Besides, road maps for the future are disclosed in regard to particularly important portions. It seems that, because of the above, development can be carried out without anxiety. In that sense, the arguments that it is necessary to realize opening and that platforms are the foundations are meaningless unless they are stable are important for the development of services.

(Member)

Page 16 of the Future Mobile, Inc. reference material contains specific institutional requests. By reading these requests, I understand that opening is mentioned in the paragraph titled "Clarification of entry conditions". Are there any somewhat more specific items other than opening? If so, I would appreciate it if I could be informed of such items.

(Future Mobile, Inc.)

Clarification of entry conditions concerns the fact that, when an entity intends to become an MVNO, it is unclear what the approximate fees will be. In foreign countries, it is often the case that fees are uniform. In Japan, there is a manner of thinking that it is OK if, on a win-win-win basis, there is no conflict with any carrier. Therefore, if this point is clarified in connection covenants, it will be easy to calculate fees. In this regard, if a pre-authorization screening system or the like exists, small enterprises cannot easily become MVNOs. Therefore, entry conditions are desired to be open.

(Member)

My understanding is that it is troublesome to conduct individual negotiations regarding competitive conditions and that it will be easy to do business if such conditions are made open in a somewhat clear manner. There seems to be a common awareness that it is necessary to open and software and make it uniform. Am I right to think that items to be open vary depending on the business models of the enterprises entering the MVNO business?

(Future Mobile, Inc.)

We think that enterprises entering the MVNO business may be of infinite variety. In the United States, such enterprises range from those that use existing terminals to those that develop terminals. Similarly, we think that those enterprises may be wide-ranging in Japan, yet we have not completed studies on how opening will be related to this matter. We presume that basically,

pertinent information should be disclosed not only to MVNOs, but also to entities like SPs, in the interest of developing new services that will contribute to the improvement of international competitiveness. We proposed opening policies for the above-mentioned purpose.

(Member)

What do carriers think of the preceding opinion?

(NTT DoCoMo)

MVNOs are of infinite variety, and it is therefore difficult to decide conditions in a uniform manner. In this regard, it is said that in Europe, conditions are imposed not on connection but on wholesaling. We are investigating this matter, but we have yet to discover what conditions are attached. It is our understanding that in Europe, conditions are decided via individual negotiations. There are big security problems with terminal platforms. In this connection, it is not the case that no information whatsoever is disclosed. As regards “i-mode” terminals, usable functions have been increased through consultation with CPs.

(KDDI)

We think that there is a limit to carriers’ abilities to increase market value added. In this regard, competition is still going on among carriers in regard to technologies, including platforms. Since a little while ago, discussions have been held on matters like GSM involving homogeneous platforms. We tried to implement CDMA 2000 ahead of schedule to produce higher value added, as far as possible, than for DoCoMo’s PDC. As can be gathered from this fact, we were not in a situation where achieving uniformity was attempted through consultation with DoCoMo. As regards data communication, we are promoting a method called Rev. A, and DoCoMo is pushing forward HSDPA, thus technical competition is still going on. We would appreciate it if this situation could be understood. We are subject to QUALCOMM chip specifications, and can therefore perform the standardization of terminals only within the limits of these specifications. Conversely speaking, however, software was developed based on standards for QUALCOMM chips. On the other hand, problems will arise if CPs conduct development on an individual basis when they enter the mobile business. We therefore introduced middleware called BREW in an effort to permit CPs to implement development as easily as possible. We take pride in this effort. Besides, the manufacturer not only built a platform called KCP for the purpose of reducing costs, but also promoted making terminal software uniform in an effort to eliminate unnecessary costs. In regard to the future, we are not saying that things should be done in a negative way. We think that it is our minimum obligation not to affect the existing 20 million subscribers, thus we are not in favor of building entry barriers.

(SoftBank Mobile Corporation)

In regard to MVNOs, we have been conducting negotiations with multiple companies. With some companies, negotiations are proceeding well, while with others, negotiations are proceeding with difficulty. The difference lies in the fact that MVNOs’ ways of thinking are so diverse that individual conditions cannot be uniformly solved. It is necessary for the number of instances to become large enough to permit systematization.

(Member)

I think that it is a matter of course in the sense that technological innovation is still underway. However, there are the trends of the times. The world of conventional cell phones is going to change over to the world of mobile devices involving communication modules. I presume that, under such circumstances, we cannot afford to take our time indefinitely. Personally, I have a "Suica" card from East Japan Railway Co. My understanding is that at the time "Suica" cards were first brought out, they were not intended to be circulated as electronic money. When unexpected changes occur in circumstances, I think that it is very important to cope with such changes promptly.

(East Japan Railway Co.)

As you pointed out, "Suica" cards were originally intended as simple railroad tickets. We thought that in that way they would be beneficial to the core railroad business. Subsequently, electronic money appeared in the world. Then it was decided that ordinary railroad tickets be combined with electronic money. Anyhow, we think that an ultimate solution is to lend an ear to customers' views, thereby aiming at the most convenient means.

(Member)

Supposing that 20th century IT is regarded as the IT of the virtual world, I think that it is no mistake to say that the IT of the 21st century is the IT of the real world. Mobile devices, which are positioned right on the midway point, have an affinity for account settlement with railroad-based cards. Therefore, I think that it is important to regard such devices and cards as integral.

(Member)

I think that the larger a network is, the more convenient it is to consumers, leading to all the higher competitiveness. A little while ago, it was mentioned that technological competition was still underway. No matter how excellent the technologies are, it is meaningless if networks are not expanded. In that sense, I presume that it is important how to compete in expanding networks. Moreover, when the clarification of entry conditions for MVNOs was discussed, I understand that the following was mentioned: MVNO guidelines were amended to make it obligatory to establish connection among carriers, and in spite of the amendment, specific problems arose. Do you think that such problems will be solved if various services are established, or do you think that new techniques are necessary?

(MVNO Council)

All carriers said that they were not negative. I would like to ask all carriers to switch to positive measures. Companies having PC platforms hold developers' meetings. Similarly, if MVNO promotion meetings or the like are held, we presume that many enterprises will participate. Actually, all carriers are very huge enterprises, and many of the companies that are going to enter this business are small enterprises. Such being the case, we would appreciate it if all carriers could demonstrate strong leadership in the interest of the growth of this industry.

End