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Minute Summary of the 4th Meeting of the Study Group on the Cable Television in 2010's

1. Date and time:
May 26 (Fri), 2006 16:00 to 18:00

2. Location:
Special Conference Room 1, 8F, Ministry of Internal Affairs and Communications

3. Attendees
(1) Members (Honorifics omitted)
Tsunetoshi Ishibashi, Takashi Otsuka, Yoshihiro Oto, Shigeki Goto, Toshihiko Shimizu, Kazuteru Tagaya, Kazutoshi Terasaka, Masataka Nakamura, Tadahisa Mori, Kei Morita, Hirotsugu Yamaguchi, Haruko Yamashita, Ryuji Yamamoto, (b.p.) Naoki Hayashi, (b.p.) Fujio Koike
(2) Ministry of Internal Affairs and Communications
Shimizu (Director-General for Policy Planning), Kawano (Deputy Director-General of Minister's Secretariat), Fukuoka (Director of General Affairs Division), Ando (Director of Terrestrial Broadcasting Division), Okubo (Director of Broadcasting Technology Division), Imabayashi (Director of Satellite and International Broadcasting Division), Yamane (Director of Regional Broadcasting Division), Hatano (Senior Planning Officer of Regional Broadcasting Division), Honma (Senior Technology Planning Officer of Regional Broadcasting Division), Umemura (Assistant Director of Regional Broadcasting Division)
(3) Exponents
Kusunoki (Assistant Chief Technology Officer, Microsoft Corporation), Tsuchimori (Executive Director, K-Opticom Corporation), Yasushige (Senior Director, Foundation for MultiMedia Communications), Nakamura (Chief Researcher, Mitsubishi Research Institute Inc.)

4. Proceedings
(1) Opening
(2) Hearing on future video transmission services such as IPTV
Microsoft Corporation, K-Opticom Corporation, Foundation for MultiMedia Communications and Mitsubishi Research Institute Inc.
(3) Closing

5. Major discussions
After explanations on the effort toward the linkage between communication and broadcasting by Microsoft Corporation, on the effort toward the time of amalgamation of communication and broadcasting by K-Opticom Corporation and on the trend of IPTV by Foundation for MultiMedia Communications and Mitsubishi Research Institute Inc., questions and answers were exchanged as follows:

(1) Microsoft Corporation
○ What do you think about the difference between IPTV and cable television?
←They are similar in that operators should prepare the infrastructure for transmission

channels and that multi-channels are easier to be realized, compared to terrestrial broadcasting, because they are less affected by frequency allocation.

○ As personal computers advance and individuals began to start transmitting video information, a greater volume of data will flow in a transmission channel. How do you plan to deal with transmission channels in the future?

←We believe that personal computers have flexibility in dealing with video transmission in that they offer selectable precision for video images. Users will use video transmission more and more as long as it incurs no additional cost. It is necessary to consider the balance as to who will owe the cost for improving infrastructures. It is also necessary to think about measures against the emergence of software that uses many bands, such as Winny.

(2) K-Opticom Corporation

○ Does an optical cable have two cores dropped from the start?

←The drop cable originally has a two-core structure, and thus it requires time and effort to separate the cores.

Separating core wires will spare wavelength multiplexing.

○ When, in the future, the system is changed or construction technology is developed, is there any possibility of changing to dropping one core?

←The policy for building a network is “to completely separate cores and wires,” and we do not change the policy of dropping two cores. Also, IP is used in the form of video distribution, while multi-channel transmission and terrestrial retransmission will be conducted in the cable television system.

○ Does separating the network increase the reliability?

←The major reason for separating the network is to avoid simultaneous suspension. We want to avoid the situation where none of network, telephone and television is available.

○ How about the implementation status of community channels?

←At present, K-CAT is being implemented in two cities (under preparation in one city). Some municipalities are active in providing content, while some rarely provide it. Thus we feel that the movement toward community channels is dull when compared with the number of areas where community channels are provided.

○ You told us that PLC is to be started from this autumn. What is the actual situation now?

←From the outcome of experiments, our wishful thinking tells us that it is expected to be in autumn but we have not understood the details.

○ You mentioned seamless communications. Do you have any plan of using PLC as a cellular phone transmission channel?

←We are thinking of realizing FMC with all cellular operators.

○ NTT appears to be placing emphasis on apartments, while K-Opticom focuses on single family homes. Isn’t the latter at a disadvantage in terms of cost?

←The cost has somewhat been reduced compared with that of several years ago. The company turned to the black in the last single year. The FTTH business still stays in the red, but is expected to turn to the black within this year or in the next year.

○ Aren't you using lines based on IP multicast?

←No, we don't. We concentrate our investment on the optical access network and we are not tough enough to change the backbone of the network for the present. We determined that the cable television system is more convenient when viewed from the user side. Anyhow, we know we must also implement IP multicast someday.

○ We assume that 380,000 is the number of subscribers to the Internet connection service. What are the respective number of subscribers to the optical telephone and optical television services?

←In the accumulated total at the end of March, there are 210,000 subscribers to the optical telephone service and 31,000 subscribers to the optical television service.

○ Cooperation with cable companies on optical television appears to be delayed. Doesn't that mean the pie is too small?

←We provide the optical television service as an added value to FTTH. If customers who would like to have 100Mbps FTTH also wish to watch television, they may use our service. Those who prefer the Internet based on HFC may receive an existing cable television service.

○ What is the size of the area covered? What is your future policy for uncovered areas?

←92% represents the number of households that can actually access the service, while the remaining 8% is difficult for us to cover independently by ourselves. We are going to improve the situation step by step through discussions with municipal governments.

(3) Foundation for MultiMedia Communications/Mitsubishi Research Institute Ltd.

○ You told us that your current income from IPTV comes mainly from advertisements. Is this because charging individuals is difficult?

←As you see on page 19 of the document, IPTV is not mainly based on advertisement but it includes both free content and pay content.

○ As an IPTV business model, whether it should be free distribution based on the advertisement model or pay distribution based on individual charging depends on the service form of the provider and whether or not they have any competitors, doesn't it?

←It may vary depending on the conditions in each country or region.

○ In Japan, the television picture quality is thought to be high. How do they plan to assure the picture quality of IPTV in foreign countries?

←We don't have any quantitative data, but the cause for the rapid dissemination of the ADSL television service in France appears to be the fact that there is no room for leading new cables in complex housing and that the installation of satellite parabola antennas is not allowed on the basis that they would destroy the scenery. Due to these restrictions, the ADSL television service has disseminated in spite of lower picture quality as long as the television service is available through the existing pair cables.

○ As for the open Internet, television companies in Korea and Taiwan were putting programs on the Internet after they had been televised. Viewers abroad thought it better, in spite of the lower picture quality, to watch videos after around two hours than to wait for analog videos that arrive far behind. What the users think may depend on the

countries.

End