Broadcasting System Committee, Telecommunications Technology Sub-Council,

Telecommunications Council—12th Meeting

Summary of Minutes

1. Date and Time

Monday, June 23, 2008; 15:00-17:00

2. Location

Common Conference Room 4, 1st floor

3. Agenda

- (1) Confirmation of the summary of minutes of the previous meeting
- (2) Technical requirements concerning advancement of satellite digital broadcasting
- Draft Report from the Broadcasting System Committee
- (3) Other

4. Attendees (honorifics omitted; in no particular order)

Ito (Chair; Tokyo University of Science), Aizawa (National Institute of Informatics), Katto (Waseda University), Kobayashi (Association of Radio Industries and Businesses), Sato (Tokyo University of Technology), Takada (Tokyo Institute of Technology), Noda (Japan Cable Laboratories)

Presenters: Fujita, Tanaka, Nishida, Urano (Association of Radio Industries and Businesses)

Secretariat: Oku, Fuseda, Morishita, Takubo (Broadcasting Technology Division, MIC)

5. Documents Distributed

Document 12-1: Broadcasting System Committee (11th Meeting) Summary of Minutes (Draft)

Document 12-2: Draft Outline of Report from the Broadcasting System Committee

Document 12-3: Draft Report from the Broadcasting System Committee, Telecommunications

Technology Sub-Council, Telecommunications Council

Document 12-4: Public Comment Invited on Draft Report from the Broadcasting System

Committee (MIC press release to be released on June 24, 2008)

Reference 1: Future Schedule for Authorization for Program-Supplying Broadcasting Services

Pertaining to BS Digital Broadcasting Newly Starting in 2011 and Onward (MIC press release

of February 13, 2008)

Reference 2: Public Comment Invited on Draft Basic Policy on Authorization for Program-Supplying Broadcasting Services Pertaining to BS Digital Broadcasting Newly Starting in 2011 and Onward (MIC press release of May 30, 2008)

Reference 3: Radio Interference of Some Types of BS Broadcasting Reception Systems (MIC press release of May 30, 2008)

6. Meeting Summary

After introduction of the presenters and confirmation of the distributed documents, the agenda items were discussed as follows:

(1) Confirmation of the summary of minutes of the previous meeting
The Broadcasting System Committee (11th Meeting) Summary of Minutes (Draft) was approved.

(2) Technical requirements concerning advancement of satellite digital broadcasting Katto, head of Satellite Broadcasting System Working Team, explained the Draft Report from the Broadcasting System Committee. Subsequently, the following questions and answers were made:

Q (by Kobayashi): Please explain the reasons why notes are added on pages 9, 18, and 23 of Document 12-2, respectively. As I explained in the past committee meeting, the study of satellite progress has been conducted to put technology a step ahead, which is very important for frequency policy. Therefore, we must compile our report from a long-term perspective. We undoubtedly need a perspective of developing ordinances and systems and putting them into practice by 2011, but we also need to propose technologies by looking far into the future. For example, we should suggest that we should conduct experiments on the matters in the notes to bring them to realization. By doing so, we can make our committee report valid well into the future. Another challenge in compiling the draft committee report is to identify the issues, including themes of experiments, with forethought. We must remember that the MUSE experiment that started 20 years ago laid the foundation for the creation of the HDTV market of today. Japan has led the world in the broadcasting field. Considering that new frequencies might not become available in

2011 and onward, it is crucial to present the policy clearly, and in that context, the notes play a significant role.

The "purpose and background to the advancement" on page 1 of Document 12-2 refers only to the Study Group on Future Images of Satellite Broadcasting. I think it should cite the Study Group on Next-Generation Broadcasting Technology as well. Meanwhile, ARIB will establish the Ultra High Definition TV Studio Facilities Development Group next month. With this momentum, the notes have a very significant meaning. From the wording of the current draft report, some people may think negatively about new technologies.

A (by Secretariat): Thank you for pointing out very important issues. The consultation we are working on now asks what kind of technology should be adapted in 2011. Technical standards should exist for granting radio station licenses and authorizing providers, not for presenting guidelines for future advancement. This report should identify technical standards to be institutionalized for services to be provided in 2011. We are inviting public comment on the Draft Basic Policy on Authorization (Reference 2). The basic idea of authorization is that its main purpose is to promote HDTV. The draft committee report should be in line with that. I understand that the notes were added as a result of the objective deliberations on the level of technologies in 2011. I also believe that the committee has proactively discussed technologies beyond that point, and consequently reported both the technologies that should be the technical standards in 2011 and the technologies beyond 2011. We may need to have separate discussions on a roadmap for advancement of future satellite broadcasting, but please be reminded that our current discussion is on technical standards toward 2011.

A (by Kobayashi): My understanding is that the notes refer to matters that will not be institutionalized. Page 3 of Reference 2 says that "frequencies will be allocated (to experiments) only when possible, in consideration of the situations concerning frequencies." As experiments are recognized in that way, the notes in the report have a significant meaning.

A (by Secretariat): We put the notes considering the technical standards toward 2011. MIC must make a decision as to the handling of experimental radio stations in 2011. The Rules for Regulating Radio Equipment specify the rules for actual radio stations, rules for licensing actual radio stations. It does not mean that you cannot conduct experiments because this report does not refer to them. The main purpose of the draft basic policy, on which we are now inviting public comment, is to facilitate HDTV broadcast for BS,

including CS110, and allow experiments if there is any channel available. I understand the opinion that this Committee should promote experiments, but the point is that experiments should be conducted not for experiments' sake, but for commercialization—the private sector should consider those and the government should make a decision. Please keep that in mind and think about possible implication of submitting a committee report to the MIC Minister, stating, "Experiments should be conducted."

A (by Chair Ito): Please specify, "(the Committee) has studied technologies that can be introduced in 2011" on page 1 of Document 12-2 as well as in the Introduction of the draft committee report.

Q (by Kobayashi): Since Reference 2 states that experiments can be conducted when frequencies are available; it is not strange to describe the matters to be considered upon conducting experiments. Rather, adding such description will encourage the study at ARIB. My concern is that people will view this report negatively so that the door to the future development of technologies will be closed.

A (by Secretariat): We do not intend to end the advancement efforts in 2011, either. Albeit with the notes, the report refers to technologies in 2011 and onward. We hope to continue studies on such technologies.

Q (by Noda): Are 16APSK and 32APSK included for advanced narrowband CS?

A (by Tanaka): No.

A (by Noda): If not included in CS, I agree.

A (by Chair Ito): I suppose it is because the advanced narrowband CS is based on DVB-S.2.

Q (by Aizawa): On page 5 of Document 12-2, only voice service is shown in red, while video service is not in red. It appears as if the expectation for video is negative.

Q (by Takada): I heard that the antenna diameter is greater for multilevel modulation. Could you explain your thoughts about the future advancement in peripheral technologies from the following perspectives: User acceptance of larger antennas, and expected increase in transponder output?

A (by Tanaka): (Provided explanation based on Reference 1-11.)

Q (by Takada): Backoff has a negative impact on the antenna diameter issue. Does the

technical standard prioritize the time rate? If so, and if reception is possible only with a circuit design of 120cm because the draft committee report specifies it as 120cm, the possibility of introduction is quite low, even with an additional note that says it can become applicable with future advancement of peripheral technologies.

A (by Chair Ito): According to Reference 1-11, reception with a 60cm antenna seems possible if you sacrifice the time rate slightly.

Q (by Chair Ito): Section 5, "Future Issues," of the draft committee report does not refer to the issues on video coding systems at all. It is better to include issues in achieving service launch in 2011 or issues in 2011 and onward in a way that differentiates the two.

A (by Kobayashi): We can find information required for that revision in the main text of the draft committee report, so it will not take much time and effort.

Q (by Chair Ito): In addition to that, "the target of service launch in 2011" should be stated more clearly in the "Introduction" of the draft report. If you do that, not changing the existing reception environment, that is, using the same antenna systems, and not increasing the satellite's transmission power become the preconditions, which facilitates our future efforts to organize issues and compile reports. For your reference, when we worked on the broadcasting system for advanced narrowband CS, it was explained that the number of HDTV programs could be increased without changing the existing reception environment.

Q (by Sato): It appears that 8PSK, 16APSK and 32APSK are presented on the same footing on page 11 of Document 12-2. It is better to clarify the position of each.

A (by Chair Ito): That point is described on page 41 of the draft committee report. We should compile the Telecommunications Technology Sub-Council's outline document from a focused perspective.

A (by Secretariat): We will add Table 2.2-12 on page 41 of the draft committee report to the outline document.

A (by Chair Ito): Please include the comparison between the existing BS digital system and the new system in the data on page 3 of Document 12-2, as well.

Q (by Noda): Will Document 12-2 be presented when inviting public comment? A (by Secretariat): No.

Q (by Kobayashi): The note on 3840x2160/60/p on page 18 of Document 12-2 differs from the note on page 133 of the draft committee report. Do the two have different implications?

A (by Chair Ito): It seems that the description was shortened for Document 12-2 due to space limitation.

A (by Kobayashi): The draft committee report has a note on "reception devices, etc." It is strange to say that broadcasting can be started only when suitable receivers are widely used. In the case of high vision BS digital broadcasting service, initially, only one channel provided the service, but about a million units of receivers have since penetrated. Considering that case, it is questionable to refer to "reception devices, etc."

A (by Chair Ito): My understanding of what the portion implies is that it will become applicable after receivers become easily available. What it implies is different from "the format for which we must confirm the technical feasibility," which was stated regarding the handling of 1080p in the 1997 report on BS digital broadcasting.

Q (by Takada): The draft committee report does not explain the background for the study of the new system. Is that intentional?

A (by Secretariat): We will describe the background on the cover page of the press release.

Q (by Kobayashi): It is better to add Reference 2 as a past press release in the section of "related press releases."

Following the above questions and answers, it was approved for the Secretariat to send the draft revisions based on today's deliberations to the members so that they can check the specific revisions by tomorrow (June 24) morning.