

Telecommunications Council, Information and Communications Policy Committee Digital
Content Trading Promotion Committee 6th Meeting Minutes

1. Date: 17:00-18:30, Tuesday, December 5, 2006

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

3. Attendees (Honorifics omitted)

(1) Committee members (Including expert advisors)

Jun Murai (Chair), Nagaaki Oyama (Vice-Chair), Mutsuya Asano, Tomoyuki Ikeda, Tsunetoshi Ishibashi, Yuu Inaba, Yoshiyuki Uei, Tetsuya Obuchi, Naotaka Kacho, Makiko Kawamura, Junichi Kishigami, Nobuhiko Sato, Kazuo Shiina, Yoshiyuki Seki, Mitsuo Sugawara, Shinji Takada, Nobuko Takahashi, Shuichi Tago, Miki Nagata, Akio Nosaka, Hidetoshi Haeno, Toshio Fukuda, Yoshitaka Hori, Tatsumi Yoda (24 members)

(2) Observers

Makoto Kawase (Agency for Cultural Affairs), Tomoko Kono (Sony Corporation), Yoshitaka Sugihara (Intel Corporation), Yuichi Tsubouchi (Japan Electronics and Information Technology Industries Association [JEITA]), Shuji Nakamura (Mitsubishi Research Institute, Inc.), Yoshiji Nakamura (Japan Association of Music Enterprises), Kosaku Hatanaka (Intel Corporation), Keiya Motohashi (Japan Broadcasting Corporation [NHK]), Kensuke Yasue (Mitsubishi Research Institute, Inc.)

(3) Secretariat

Ogasawara, Director, Contents Development Office, Information Policy Division, Information and Communications Policy Bureau

(4) Ministry of Internal Affairs and Communications

Nakata, Deputy Director-General, Minister's Secretariat; Katsuno, Deputy Director-General, Minister's Secretariat; Fujishima, Director of the Regional Broadcasting Division

4. Agenda

(1) Concept regarding the use of content — Discussions (1)

- It was confirmed that there is the following difference between Japan and foreign countries. In foreign countries, consideration is given to the fact that terrestrial broadcasting constitutes key broadcasts of an extremely high public nature, and therefore, terrestrial broadcasting is basically

operated on a copy-free basis to develop an environment where high quality content can be run continuously. In Japan, however, terrestrial broadcasting is operated on a copy-once basis, and this fact is irregular. JEITA considered the comparison with foreign countries, the relationship with pay broadcasting, and the fact that assurance of a reasonable extent of viewer convenience is required. As a result, JEITA believes that the basic task is to review operations under the output protection (EPN) scheme.

- On December 1, 2006, terrestrial digital broadcasting started all over the country. Now a new stage is entered, where households capable of viewing such broadcasting account for more than 84 percent. As a result, viewers are taking a growing interest in copy-once. Therefore, expectations are that there will be a rapid increase in viewers' comments. Consequently, it is necessary to take some measures. If arguments fail to come any closer to agreement, a situation that is disadvantageous to users will persist, thus hindering a widespread smooth transition to terrestrial digital broadcasting. JEITA therefore wishes to positively consider realizing the following as a first step to the full switchover to digital broadcasting in 2011: EPN will be applied in principle; and COG will be used concurrently only in respect to a limited number of programs for which the necessity of COG or copy-once can be explained reasonably.
- From the viewpoint of promoting the understanding of viewers, we would like to request that broadcasters give sufficient explanations at an early stage. JEITA will cooperate in this connection. If operations are to be performed by concurrently applying EPN, or if operations are to be renewed, we presume that it would be necessary, for example, to hold sufficient prior consultation or to give notification of problems.
- The Third Interim Report states that studies will be conducted with the aim of applying EPN to broadcast programs. Broadcasters take this statement seriously and are currently making studies as to whether this application is feasible. In this connection, it is difficult to draw a clear and objective line of demarcation in regard to differential use of EPN and COG depending on broadcast programs. Broadcasters believe that the standpoints of rights holders and the like should be equally respected, and that all broadcast content is rich content. Therefore, COG operations are performed uniformly.
- We know that it was pointed out that higher convenience is better suited for educational purposes. We intend to obtain the understanding of viewers by means of programs produced in such a way as to have no effect on rights holders other than broadcasters and programs to be newly prepared from now on. In this connection, we are conducting careful studies as to whether specific programs can be subjected to the EPN rule.
- It has become a common understanding that it is possible to flexibly review the operating rules on the basis of COG. We think that it is a matter of course to flexibly change the operating rules in

maintaining technological progress and viewer needs, and we have been making arguments along this line. It seems that taking the trouble to subject certain broadcast programs to EPN is unnecessary. This is because we presume that even if we do not do so, sufficient convenience can be practically ensured in regard to viewers' private use, resulting in this problem being solved promptly.

- We have been saying so far that broadcast programs are intellectual properties. For example, if a regular distribution scheme is created whereby missed programs can be viewed on demand, then this scheme deserves to be called an intellectual property. We believe that the establishment of such a scheme will lead to the curbing of illegal distribution. If the diversification of users' viewing opportunities is dealt with by protecting content that is an intellectual property, then it will contribute to industrial development in Japan. If illegal distribution risks for programs increase, it will become impossible to broadcast high quality programs, resulting in secondary and tertiary distribution of content being hindered. Such a situation should be avoided.
- New services have arisen whereby, for example, Internet technologies are utilized in such a way that broadcast programs videotaped at home can be enjoyed even when users are out of town. However, if EPN is applied, Internet transmission will be prohibited, resulting in such epoch-making services failing to be realized. It is necessary to create new rules in keeping with the times and technological progress, thereby ensuring convenience. We broadcasters would like to flexibly deal with such necessity.
- I take it that an understanding that copy-free is undesirable and no rights should be violated is shared based on the discussions held so far. Broadcasters argue that it is necessary to impose copy controls that are capable of generation management. I believe that all committee members have an increasingly clear understanding of this point.
- Device manufacturers say that there have been no changes in their standpoints since before this committee was founded. We cannot regard such stances as forward-looking. We are not in a position to confront those manufacturers, but we would like to say that they provide no information on whether it is acceptable to leave moves as they have been so far or on whether pointed-out items were improved. Questions arose as to whether moves of one minute or more are covered by international standards. Device manufacturers are going to take the course of action set up until now without clarifying such a point. We cannot help being doubtful about this stance.
- We have made proposals for backup functions including arrangements whereby original content is erased after moves are completed. We would like to deal with changing the rules in a more forward-looking manner if a balance can be struck between rights holder protection and user convenience and if consent can be obtained from the parties concerned, including device

manufacturers.

- How the concurrent use of EPN and COG will contribute to the “development of an environment where high quality content can continue to be run” is very questionable. It is reasonable to impose copy restrictions. If there are any opinions or comments on operation-related issues, we would like to make improvements by considering such opinions or comments.
- True protection technology is a system where guardrails that protect literary works from unexpected outflow of content are installed, where gates that protect correct distribution of literary works are additionally installed, and where a balance that can satisfy all people concerned with reproduction, including rights holders creating literary works, is provided. It is important to introduce protection technology based on the concept that reproduction should be properly guarded against.
- Movie producers did not approve of reproduction even in the analog age. The analog environment was not an optimal reproduction environment for users, therefore striking a balance. In the digital age, rights holders are concerned that only the users will enjoy advantages in the case of copy-free. It is important to introduce true protection technology, thereby striking a balance.
- In the case of EPN, no restrictions can be imposed on generations or numbers of copies, but no content is sent to the Internet, and thus EPN is about the same as copy-free. This knowledge has been shared. Almost all devices support EPN. This situation is nothing other than copy-free. The fact that no generation restrictions can be imposed leads to reproduction in large quantities, resulting in the possibility that copies exceeding the limits of private reproduction will be created.
- As regards the possibility of schemes other than COG and EPN, in the case of a device where a tuner, a hard disk and a DVD are installed in the same casing, a number of various methods can be applied if the Broadcast Operating Rules are modified. Therefore, studies on such methods should be conducted. In this sense, the prospect of a course of action has come into view.
- By modifying the ARIB Broadcast Operating Rules, a certain degree of generation restriction can be imposed. In this connection, I hope that discussions will be conducted in such a way as to discover a course of action for operating methods that allow certain numbers of simultaneous copies to be made.
- It is argued that terrestrial broadcasting in Japan should be protected more strongly than in foreign countries. It is also argued that features of terrestrial broadcasting that are unique to Japan form the background for the above. However, as far as seen from information like reports on overseas surveys, such arguments are unreasonable. They are not persuasive. With regard to theatrical

movies in Japan, the only relevant explanation was given to the effect that irregularities due to reproduction are fundamental. However, no persuasive explanation has yet been made to warrant the application of the copy-once rule, unprecedented elsewhere in the world, to all broadcast programs.

- In the course of establishing the copy-once rule, device manufacturers stated that if receiver operation is improved with the copy-once rule as is, there will be no change in convenience except in the case of built-in types. This statement was tantamount to saying that it is impossible to change the copy-once rule. The statement that it is impossible to change the common rule meant, in reality, that it is time-consuming to change the rule. It was evidently wrong for them to say that the rule is common to the world. While being aware of the above, device manufacturers have so far participated in discussions without making any explanations to consumers. This act is a very insincere one.
- From the viewpoint of copy protection, it is indispensable to take the standpoint of confirming how effective such protection is in crime prevention. However, it is necessary to ascertain the balance among the crime prevention effect as is, the degree of loss caused by the pertinent crime, and the crime prevention effect to be realized by the pertinent countermeasures. It seems that in the United States, copyright protection for terrestrial broadcasting is discussed only from the viewpoint of the balance in respect to convenience in private use. To begin with, I wonder what the purpose of copy-once is— the prevention of crimes or the imposition of restrictions on private videotaping.
- It is argued that in anticipation of future changes in the terrestrial broadcasting system, copyright protection will be provided now. This argument is not persuasive as a reason for restrictions. An opinion was expressed where, even in the case of the current free commercial broadcasts, restrictions would be imposed by the copy-once rule in such a manner that the second and later copies would be provided by charging users. In this connection, if uniformly and mechanically restricting consumers' behavior and charging them were permitted, it would mean that business opportunities exist everywhere. The reality in Japan is that rules for free commercial broadcasts are decided without considering consumers, resulting in convenience being restricted.
- There is no way to give reasonable explanations as to which programs are to be subjected to the COG rule and which programs are to be subjected to the EPN rule. This fact is equivalent to a situation where no reasonable explanation can be made about applying COG. Japanese enterprises disregard consumer convenience, and it is therefore impossible for them to do content business in an internationally acceptable manner. Only enterprises that consider consumer convenience, user-friendliness of systems, attractive services, and balance in price setting can do business in an internationally acceptable manner.

- The copy-once rule, which is unique to Japan and which is other than the COG rule, is groundless, and therefore it should be abolished. In regard to the broadcast programs to which copy-one-generation should be applied, it is necessary to show the reasons for application and the profiling of requesters. Apart from the above, I hope that it will be arranged so that users will not feel that restrictions are imposed on private videotaping.
- There is an argument that the reason why terrestrial broadcasting involves first windows is that in Japan, rich content is provided, while in the United States, lean content that does not require protection is provided. However, this argument has broken down. International standards are different from the rules applied to the DVD recorders that are currently being sold equipped with digital tuners. I am convinced that there are alternatives to copy-once and copy-never as they are now, and that a fifth alternative is also feasible. Consumers will make the final decisions on each of the alternatives.
- Several points that have not been clarified yet should be made clear. On this basis, all parties concerned, including broadcasters, rights holders, device manufacturers, and consumers, should put their heads together. This will naturally result in a mutually painful compromise. In light of the intent of this meeting, it is not permissible for device manufacturers to say that they alone will go ahead without making any change.
- There are cases where even if a selection is intended to be made, necessary information is not properly provided, thus giving rise to perplexity. Examples of such information may be as follows: description of various methods available; effects exerted on individual machines by changes made to various aspects; feasible items; infeasible items; items subject to price increase; and time-consuming items. I would like to ask that requests for any such information be submitted. I hope that arrangements will be promptly made whereby sufficient explanations are given to consumers to help them make selections.
- There are three parties: those who create content, those who protect content, and those who utilize content to conduct business. It is quite difficult for these three parties to converge in the same direction at the same level. It is necessary to find a point of compromise somewhere. Otherwise, I presume that these discussions will turn out to be unproductive and endless.
- It is never the case that the concept of copy control in Japan fails to conform to the common practice of the world. In order for Japan to become a decent content power, it is justifiable for Japan to have its own method.
- Rights holders inevitably protect their rights, which constitute the essentials of their business. Device manufacturers, in turn, claim their interests. In present-day Japan, large numbers of pirated

versions are rampant. In these circumstances, in order to develop an environment where Japanese content can be used more freely and in larger quantities, it is necessary to implement a certain degree of copy controls for having consumers properly follow rules.

- Re: Question (1) -1): In our capacity as rights holders, we do not intend to go so far as to apply controls to items considered to be private copies. We would like to say that we would be perplexed with over-protective rules that go as far as to permit copies to be provided to the general public.
- Re: Question (1) -2): In the case of Sub-item 1) above, we understand that if controls are applied to intra-home copies that do not result in them being provided to the general public, it is possible to prevent acts of providing copies to the general public, including acts of producing pirated versions. In this connection, it is necessary to ascertain the extent to which intra-home copies do not result in them being provided to the general public. If this was ascertained and consent obtained, we would have no intention of imposing controls on intra-home reproduction.
- MPAA's basic windows for theatrical movies in the United States are as follows: Such movies are released to theaters; then they are released to airlines; DVD packages, etc. are put on sale three to four months after those movies are released to theaters; the movies are shown by in-house broadcasting in hotels immediately after DVDs are put on sale; VOD and PPV are started 45 days after DVDs are put on sale; the movies are shown by premium television broadcasting by HBO, etc. 60 days later; they are shown by free television broadcasting 18 to 24 months later; and then they may or may not be shown by cable television broadcasting.
- MPAA's basic windows for theatrical movies in Japan are as follows: As regards airlines with which contracts are concluded in the United States prior to release in Japan, there is a possibility that the movies will be released to such airlines prior to release in Japan, and in such cases they are released to theaters in Japan thereafter; subsequently, package sales of DVDs, etc. are started; the movies are shown by in-house broadcasting in hotels one month after DVDs are put on sale; VOD and PPV are started 90 days later, with rights held for 90 days; there is a 90-day blackout period thereafter, during which the movies are shown by Japanese premium pay television broadcasting of WOWOW and Star Channel; and they are shown by free television broadcasting 18 to 24 months later.
- Windows for Japanese movies in Japan are as follows: Such movies are released to theaters; DVDs are put on sale six months later; the movies are shown by free television broadcasting one year later; and then they are shown by pay broadcasting. The scheme for theatrical movies produced by MPAA is such that invested capital is completely recovered in that they are put on the global market before being shown by free television broadcasting. On the other hand, in Japan, the three pillars of recouping consist of release to theaters, sales of DVDs, and showing by free television

broadcasting. Therefore, Japanese movie companies cannot survive unless movies are shown by free television broadcasting. If free television broadcasts are subjected to the copy-free rule, it is feared that multi-use will be hindered in the second and later cycles.

- Re: Question (2) -1): We are confident that dramas, music programs, and sports programs are all rich content, regardless of types and timeframes, thus we broadcast them with confidence. In this connection, there is room for studies in respect to programs that will be newly produced from now on and those for which negotiations will be held with copyright groups in regard to rules, etc. for performances. Essentially, our understanding is that if the EPN rule is applied, under which illegal copies are liable to flow out, it will be very difficult to produce and procure content.
- Re: Question (2) -2): Election broadcasts also include notifications of the Election Department of the Ministry of Home Affairs, which is the predecessor of the present Ministry of Internal Affairs and Communications. We broadcasters do not take the initiative in producing election broadcasts, therefore these broadcasts differ in nature from other programs. Such being the case, we broadcasters do not think that we are in a position to answer the question of whether it is possible to perform procurement under the EPN scheme. With regard to programs of a high public nature, as well as educational programs, we are conducting studies on whether or not there is such a possibility.
- Re: Question (2) -3): We broadcasters do not intend to impose restrictions on private use, which is permitted under the Copyright Law, as a matter of course. We hope that copyright specialists and rights holders will hold discussions on what private use refers to. We think that there are various arguments about whether private use is the same as in the analog age. There is an issue of how intra-home use of content will be technically guaranteed, and we believe that device manufacturers will carry out a variety of technical development in this respect from now on. In this connection, we feel that it is desirable for it to be arranged that private use can be made positively.
- Re: Question (2) -1): Our understanding is that a very serious hindrance will be caused if procurement is performed under the EPN scheme. There are cases where rights can be handled collectively in regard to broadcast programs. In this connection, there is the issue of whether EPN or COG is to be adopted when problems arise among rights holders as to the choice of EPN and COG. When this matter is considered, there is a question of whether high quality content can really be ensured. It is very difficult to draw a line of demarcation. Moreover, we would like to further mention that if it is decided that EPN and COG should be used concurrently, there is a question of whether smooth broadcasting can really be performed.
- Re: Question (2) -2): This question was formulated after giving thought to who will seek to make copies in case programs like election broadcasts are subjected to the EPN rule. This question is very

difficult to understand. I would therefore like to ask the questioner to elaborate on the meaning of the question.

- Users want to copy content in various ways, as well as editing, at home. This is very understandable. It is not that the rights enjoyed so far will be restricted. However, as we understand it, some of the aspects that exceed certain limits will not be permitted. There is an issue of where to draw lines of demarcation. We believe that this issue, including the matter of copyright, should be left to expert advisors for discussions.
- Re: Question (2) -1): We rights holders believe that if the copy protection status were shifted to EPN, it would have a very great effect on rights holders, because EPN does not allow control on the number of copy generation nor the number of simultaneous copies. Therefore, we presume that production would be hindered. It may be OK to subject election broadcasts to the EPN rule if anyone concerned wants it that way.
- Re: Question (2) -3): There is a question of whether it is legally permissible to privately dub and edit content, as well as to privately edit literary works. In this regard, in the case of NTSC (involving yellow, red, and white terminals for analog broadcasting), macrovision is applied, and therefore, even if a connection is established with video recorders, no content can be videotaped. I presume that it is not necessary to make this arrangement. I feel that it is advisable to switch to a method whereby videotaping and editing can be performed by video recorders. I do not know why macrovision is applied. In this regard, I presume that no one has the right to make an arrangement whereby people who paid money to purchase video recorders cannot use these devices.
- Re: Question (3) -1): With regard to the act of “making copies on three media” through IEEE 1394 interfaces or the like, no restrictions are imposed as to how many as long as “COG” content is stored on the pertinent hard disk. In this connection, if copies are made in different formats in the same casing or if copies are made on different media, then it becomes possible to make a maximum of three copies. Under these DTCP specifications, connection is established by means of bus bridges, except in certain instances. It is stated that authenticated devices are connected. It is also stated that the number of such devices that can be connected does not exceed 34. Setting aside the issue of whether more than 34 devices can be physically connected, you may as well understand that it is possible to connect up to 34 devices and that the upper limit of the number of copies made per device is three.
- Re: Question (3) -2): Our understanding is that, in regard to the act of “making copies onto three media” through IEEE 1394 interfaces or the like, the compliance rules make no express mention of whether it is necessary to be certain to perform this act “simultaneously.” In this connection, there is the issue of whether it is permissible to make copies simultaneously and of what the time lag

should be if it is not permissible to do so. It is our understanding, in this regard, that there is no choice but to pass judgment by actually reading the pertinent rules.

- Re: Question (3) -3): The provisions of the DTCP rules, which cover cases where content is transmitted and received through IEEE 1394 interfaces or the like, do not cover cases where a “tuner,” a “hard disk” and a “DVD recorder” are housed in the same product.
- In the case of EPN, what measures are taken against the compromise of keys? System safety depends on encryption techniques, key lengths, and key safety management, however no explanation is given at all on this point. If keys are cracked, a completely copy-free state occurs. I would like to be told what explanations are given to rights holders and of what is mentioned, by device manufacturers, as the means of ensuring system safety.
- At present there are 11 types of protection technologies approved by D-PA that are allowed to be installed in receivers. Each type has its own unique keying method, and the technology and contract content for each type are evaluated by the D-PA Evaluation Committee.
- My understanding is that the method proposed by JEITA is such that if encryption is applied to content on media and if relevant devices are regular ones, then the encrypted content can be decrypted. Judging from general forms, I believe common keys are used in these operations. How are keys inserted into devices and how are such keys managed? Naturally, the fact that keys will be compromised is anticipated. What countermeasures are taken? I presume that safety cannot be ensured unless measures are taken against compromise.
- If content transmitted by terrestrial digital broadcasting is to be videotaped as is, this is feasible in the case of analog terminals. However, if content is stored one time and it is to be videotaped by a video recorder connected to the same analog terminals, with the content being played back, then macrovision is applied, resulting in a failure to videotape the content.
- If content is stored one time, a no-more-copy state occurs. Therefore, if the stored content is to be relocated, macrovision is applied, resulting in a failure to videotape the content.
- The copy-one-generation rule pertains strictly to generation management, and contains no provisions for hard disks. The DTCP rules specify the provisions for relocation from hard disks. My understanding is that if a different casing connected to an external device has a different license or is a different product, it is possible to make three copies per casing.
- Copy-one-generation is such that content relocates out of a source function into a sink function in a copy-free state through IEEE 1394 interfaces, and still remains in the source function in a COG

state. The provisions of the DTCP rules apply strictly to that portion which went out of the source function. They do not state that no content should be left there.

- The DTCP rules specify the behavior to perform when the IEEE 1394 interface on the right of the figure is traversed. The TR-B14 operating rules specify the behavior to perform before the IEEE 1394 interface on the left of the figure is entered. That portion on the right side of the box, which is indicated as “DTCP,” is covered by the DTCP rules, and the right side is covered by the ARIB rules. Therefore, my understanding is that the DTCP rules do not specify whether a copy is first stored in a no-more-copy state or in a COG state after being received.
- My understanding of the explanations is as follows: The ARIB rules provide that content should be stored in videotaping media of receivers in a no-more-copy state. Thus, according to the current rules, a move takes place when DTCP is applied. The operating rules of ARIB specify whether a COG state or a no-more-copy state should occur and in what condition the pertinent content should enter the hard disk of the receiver. The DTCP rules specify the following procedures to be performed when IEEE 1394 interfaces are traversed: A move should be made if the original state is no-more-copy; or one copy may be made if the original state is COG, since one-generation is allowable.
- Rules pertaining to “a maximum of 60 seconds” during moves, for example, are a matter of DTCP involving IEEE 1394 interfaces. It was also mentioned that this matter was decided in the ARIB rules, not in the DTCP rules.
- It was also mentioned that location-free television is infeasible under the EPN rule. In this connection, location-free television has nothing to do with EPN or COG.
- It is necessary to give easy-to-understand explanations of specific effects on users and of usage comfort, with mention made of the necessity to compare merits and demerits.
- As regards technical understanding, there are several difficult points, including what should be done when codes are broken. I presume that it is still necessary to give circumstantial explanations on details of analog content copying procedures and on usage comfort. Nevertheless, I feel that necessary explanations were given to the extent that a technical understanding is shared with regard to content protection.

(2) Schedule of future studies

- Based on Document 2, Mr. Ogasawara, Director of the Contents Development Office, explained the schedule of future studies.

End