Report by Study Group on Systems in Ubiquitous Network Society

Aiming to develop frameworks that use vigor and creativity, and that provide security

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Study Group on Systems in Ubiquitous Network Society

Introduction

Fast-evolving new technologies and launch of new products and services in the information communication field have been dramatically changing the social, economic and living environments of every individual in Japan. Projecting an image of future society with these changes as the "ubiquitous network society" and aiming to discuss measures to realize that society, the Ministry of Internal Affairs and Communications organized meetings of the Policy Roundtable for Realizing Ubiquitous Network Society from March to December 2004 and compiled the "u-Japan Policy" in December of the same year.

The Study Group on Systems in Ubiquitous Network Society focused mainly on the 100 issues (issues that could become present or future challenges as the ubiquitous network society progresses) listed in Chapter 10 of the u-Japan Policy, "Upgrading Enabling Environment." It examined whether each issue is appropriately addressed under existing systems despite changes in its positioning and the situation that has occurred along with changes in its environment, or whether various new issues that had not been assumed under the existing systems are emerging, and discussed how to respond to them.

This study group held meeting sessions upon request three times between February and July 2006 under the initiative of the Institute for Information and Communications Policy. Although the meetings covered wide-ranging issues, this report reviews the matters that are important as crosscutting or new perspectives in the Overview and writes about respective issues in the Specific Issues. For the "Secure intellectual property rights" section under Specific Issues, we are attaching a draft proposal, which is one of the results of the discussions that were separately conducted by a committee to study copyrights for the ubiquitous network society, as a reference for this report.

As pointed out in the course of our study, the "100 issues" mentioned above require continued review because the information communication field is dynamically changing. The "u-Japan Policy" stresses that it is essential to understand the progress of measures and assess them when necessary in the PDCA (Plan-Do-Check-Act) cycle. We hope this report by our study group will be used in the PDCA cycle.

Masao Horibe, Chair of the Study Group on Systems in Ubiquitous Network Society

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- 1-1 Aiming at developing frameworks that provide security
- (1) Five years have passed since Japan enacted the IT Basic Law to facilitate focused and prompt development of the advanced information communication network society. During these years, the "e-Japan Strategy" that aimed at turning Japan into the most advanced IT nation in the world by 2005 was launched and the public and private sectors implemented intensive initiatives together based on the strategy. Consequently, in terms of infrastructure, the fastest and most inexpensive broadband environment in the world was brought about in Japan.
- (2) Seeing the smooth development of the broadband environment, the IT Strategic Headquarters worked out its "e-Japan Strategy II" in July 2003 to shift the priority of the strategy from developing infrastructure to promoting usage. In December 2004, the Ministry of Internal Affairs and Communications (MIC) compiled the "u-Japan Policy" in order to realize the ubiquitous network society that provides easy connection to networks "anytime, anywhere, by anything and anyone" and allows value creation with ICT by 2010. In January 2006, the IT Strategic Headquarters formulated the "New IT Reform Strategy" as Japan's IT strategy after 2006. These initiatives have contributed to various developments in Japan, in both ICT use and infrastructure development, including promulgation of e-money using contactless IC cards and expansion of information dissemination via blogs and SNS.
- (3) The ongoing progress in ICT use is improving convenience in the lives of the people and enabling everyone to boost vitality and creativity dramatically. On the other hand, Japan is facing new challenges as phenomena of a social change that no other country has ever experienced, including leaking of confidential information caused by infected P2P file exchange software. To appropriately secure user benefits under these circumstances, Japan has made timely responses in judicial systems, such as the amendment to the "Law on Topics including the Appropriateness of Sending Specified Email Messages" (enacted in November 2005) and the "Law on the Prevention of Unauthorized Use of Cellular Phones" (fully enforced in April 2006), and has committed itself to the enforcement of such laws. These initiatives, as well as the progress of infrastructure development, have been attracting attention from other countries. It is required to continue promptly identifying and solving issues and build necessary social frameworks so that every one of the people living in the ubiquitous network society can safely enjoy the benefits of the society fully.
- (4) Based on the "100 issues" in the ubiquitous network society listed in the "u-Japan Policy" and aiming to follow them up, the Study Group on Systems in Ubiquitous Network Society identified new issues that require attention and existing issues to which responses are increasingly necessary, and discussed the direction to take from the mid-term perspective. The outline of the discussions is presented in the following pages. It is apparent that the situation has greatly changed in terms of both technology and services in the almost two years since "u-Japan Policy" completion in December 2004. As the "u-Japan Policy" pictures the image of society that Japan should realize by 2010, continued review of the status is required.
- 1-2 Establishing a comprehensive judicial system based on the characteristics of information
- (1) When considering responses to various issues on networks including the Internet, there could be roughly two types of response: (1) establish laws that focus on acts on networks (e.g., Unauthorized Computer Access Law, Wiretapping Law, and Provider Liability Limitation Law),

and (2) revise general laws that are applicable to off-network acts (e.g., Civil Code and Penal Code) so that they would apply to acts on networks.

So far, various new issues that have occurred on networks have been handled rather quickly by using either of the above types of response flexibly and appropriately. However, handling each of these new network issues respectively as needed inevitably resulted in the patchwork-like development of the judicial systems. While penetration of the ubiquitous network society takes place, it is important to establish a comprehensive judicial system for the ubiquitous network by legally positioning the characteristics of information, verifying the consistency of existing laws from the perspective of information, and re-identifying issues to be handled by general laws and those to be handled by specific laws.

[Perspectives of the study]

1) Relationship between the real society and the virtual society
In conjunction with the development of the ubiquitous network society, there is no denying that
every aspect of socio-economic activities has been increasingly networked, and acts that used to be
conducted via tangible objects are being replaced by information distribution on networks as
represented by the wide use of e-money. Considering these circumstances, principles/exceptions of
relationships between offline acts and online acts or between tangible objects and intangible objects
must be studied through discussions from new perspectives that differ from conventional ones.

2) Securing international consistency

Development of the ubiquitous network society is not a phenomenon limited to within a specific country but a social change that will be shared beyond national borders through increasingly sophisticated socio-economic activities, deepened interdependency and advancement in technological development. Amid these changes there are many issues, including how to assure information security, which can be addressed effectively only when nations cooperate under a common framework while respecting the different social and cultural backgrounds of other nations fully. Accordingly, in studying various issues related to the development of the ubiquitous network society, it is important to assess international trends and secure international consistency. The above-mentioned perspective is especially critical in discussing each nation's basic laws, such as its Civil Code and Penal Code.

1-3 Use of guidelines

- (1) Generally, when the relationship of legal rules to be applied to a new service is unclear, there are roughly three types of possible response: (1) try to clarify the relationship with legislation, (2) wait until the relationship is gradually clarified as judicial precedents are accumulated, and (3) try to clarify the relationship with guidelines. The information communication field, which is changing at a very high pace, is seeking clarification of rules with guidelines or other forms more strongly than other fields because, in many cases, enterprises and users cannot wait until judicial precedents are accumulated when making snap decisions on providing or using a new service involves risks.
- (2) Therefore, in order to respond to the emerging issues on networks, many guidelines and marking systems have been established by administrative bodies and private organizations.

Although these guidelines and markings are uniformly called a guideline or a marking, the enacting body, formulation process and effectiveness vary. As a result, users do not always find it easy to understand the realities. Existing guidelines differ in their nature. For example, some are intended to clarify interpretation of abstract laws by contextualizing them in the present situation, while some are formulated as voluntary restrictions. Even among voluntary restrictions, some are created according to international standards while some remain domestic standards.

[Perspectives of the study]

In general, as specific precedents have not been accumulated when a guideline is formulated, the provisions of the guideline inevitably become abstract to some extent. Therefore, the party creating a guideline must establish a process to review the provisions regularly by feeding back problems in operating the guideline while penetrating and developing the service.

1-4 User consent issues

- (1) Currently, users are increasingly asked to give consent, not only when they use online shopping or content but also at various phases of their Internet use, including when they provide personal information. To give user consent is becoming a prerequisite for users to enjoy various services over the networks.
- (2) Obtaining user consent is required for smooth implementation of e-commerce, and cases where the contract that a user agrees is unreasonably disadvantageous to him have been handled by respective laws. However, there are cases where a user is compelled to conduct an act despite his intention, due to his limited cognitive capacity or processing capacity, that would allow a third party to unfairly obtain information or profit; e.g., intentionally misleading a user to erroneously give consent that would allow spyware to be installed on his computer.
- (3) In addition, users do not always recognize respective warning messages displayed on the screen when they use various systems. Therefore, it is a challenge to design checking functions by taking into account the possibility that a transaction process required by a system would exceed a human's capacity to handle information.

[Perspectives of the study]

It is needed to study how to call users' attention appropriately by considering such aspects as users' processing capacity and cognitive level based on the limit of internet users' capacity to handle information. It is also required to discuss systematic measures so that users can proactively make their choices in the process of providing user consent. One option is to study a standard processing system.

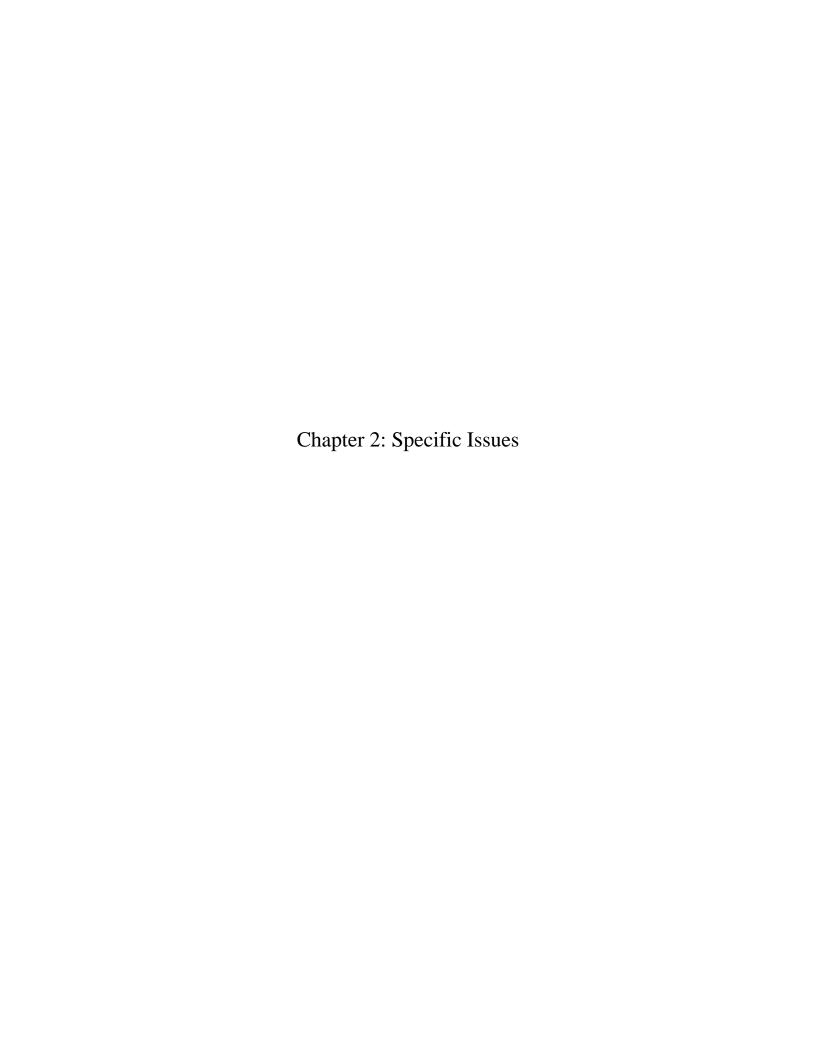
- 1-5 New issues brought about by penetration of de facto standards
- (1) Due to the characteristics of information communication networks, specific products/services are more likely to become a de facto standard or predominant among users. Under such circumstances, definitions or standards of technologies/services provided by specific enterprises, such as definition files of security software, selection criteria of filtering software, scope of availability of works with DRM, or search engine's criteria for selecting target sites, could

actually define how information is distributed or used in the entire network.

(2) The impacts brought about by such de facto standards have been discussed mainly from the perspective of competition policy. However, discussions from the user's perspective are also needed on how to secure free information distribution for users while securing diverse options according to the users' preference.

[Perspectives of the study]

As to whether such de facto standards impose restrictions on distributed information, there is a vague anxiety but no specific problem is emerging at this point. Accordingly, continuing to pay adequate attention is appropriate, rather than taking hasty measures. It is also important to discuss measures openly once any problems emerge.



X[New] marks "new issues that require attention"; [High] marks "issues to which responses are increasingly necessary"

2-1 Protect privacy

2-1-1 Monitoring and Tracing Issues [High]

- (1) Protection of privacy while using RFID tags is appropriately addressed by "Guidelines for Privacy Protection with regard to RFID Tags," however there could be conflicts of interest. If a consumer is using a product with an RFID tag attached, a malicious party could obtain their information without authorization. In the meantime, recycling or management of industrial waste requires that RFID tags be kept attached. RFID tags could also be used to understand the course of product distribution and maintain resale prices. As the use of RFID tags becomes more sophisticated, the balance with other interests needs to be considered.
- (2) As authentication technology that uses biometrics becomes more prevalent, biometrics authentication data would be retained on a mobile handset. Careful attention should be paid to prevent collection and misuse of relevant data and other personal information by a third party when the handset is lost or missing.
- (3) The use of IC cards that handle various kinds of information and that are used for multiple applications including commuter pass, e-money and mobile devices, or the expansion of joint cards that are issued by multiple business operators to combine such functions as credit card, cash card and various types of reward card, could lead to unforeseen circumstances such as the collection and circulation of extra information that is not required for card usage.
- (4) Currently, occasions where location information is handled are increasing with the launch of multifunctional services using GPS functionality and the advancement of sensor network technology. As these technologies are concerned with personal actions while contributing to safety and security and improved convenience, they need to be considered in relation to the protection of privacy.

[Perspectives of the study]

It is important to formulate relevant guidelines and indicate a certain code of conduct so that possible disputes would be prevented wherever possible and smooth economic activities would not be hampered. Upon formulating guidelines, it is essential to identify the relevant interests protected by laws and conduct open discussions based on accumulated precedents and analysis of the precedents. It is also indispensable to have the point of view that users should proactively control the distributed information by using available ICT technologies. In relation to that, research into information management technology must be accelerated for early practical application.

2-2 Assure information security

2-2-1 New malware issues, including spyware [New]

- (1) Viruses and worms have been typical malware, which refers to software designed to inflict some damage on others. In recent years, however, spyware is drawing attention as software that does not fall under self-propagating viruses or worms but inflicts damage on users.
- (2) However, it is difficult to differentiate spyware from Trojan horses that have been made an issue or to specify which software can be categorized as spyware, e.g., how to distinguish spyware from adware or an online automatic support function, because it partly depends on user's subjectivity. Therefore, the definition of the term "spyware" is not clearly established. Some point out that, in reality, definition files created by vendors who provide security software decide which software should be classified as spyware.
- (3) It is helpful to clarify the definitions and the scope of spyware to some extent, wherever needed, in order to prevent a downturn in economic activities due to the definitions that remain unclarified.
- (4) Traditionally, damages caused by malware have been primarily subject to the charge of obstruction of business, such as computer destruction, under the Penal Code. In order to improve the viability of anti-malware measures, the "Bill for Partial Amendment to Penal Code for international and organized crimes, and advanced computerization," which remains under deliberation in the Diet, proposes the establishment of a charge for creation of unlawful commands for electronic records." The new charge regulates the creation and provision of overall malware including viruses, worms and broadly defined spyware, and is expected to curb damages from malware if enacted. On the other hand, what kind of software falls under the "unlawful commands for electronic records" of the charge depends partly on the user's subjectivity. Some point out that operation of the charge could affect the provision of new services.

[Perspectives of the study]

It is expected that a code of conduct would be set out as precedents are accumulated. In the meantime, it is important to formulate criteria for interpretation so that such interpretation would be proactively clarified.

2-2-2 P2P file exchange software issues [New]

- (1) Widespread use of P2P file exchange software, as represented by "Winny," has been causing various problems including (1) leaking of confidential information or personal information caused by virus infection via P2P file exchange software and (2) excessive load on communications equipment due to increased traffic.
- (2) Actions currently taken are thorough implementation of countermeasures such as use of computers for business separately from privately owned computers for problem (1) and restriction of communication band by ISPs for (2). Relevant organizations should continue to cooperate in implementing comprehensive measures.

[Perspectives of the study]

Some point out that the P2P technology itself is useful, as it is expected to have broad applications. Therefore, new countermeasures should be examined while taking care not to restrain development of useful software technology.

2-2-3 Botnet issues [New]

- (1) The so-called "botnet" is a general term for networks composed of multiple "bots," which constitute a type of virus. The "bot" functions differently from conventional viruses or worms as it infects a computer without being noticed by its user and operates simultaneously with other bots under a common command from outside to launch a cyber attack against a specific target.
- (2) The background that causes cybercrime including bots is a high return at a low implementation cost. It is also noted that more and more crimes are committed as organizational crimes and use increasingly more sophisticated means and technologies to avoid detection; e.g., narrowing the target of the attack or optimally controlling the number of computer terminals to launch an attack.

[Perspectives of the study]

New countermeasures should be appropriately examined through understanding the reality of the damages and assessing the viability of effective technologies. It is also important to study general measures, including user education.

2-2-4 Issues on information security laws [High]

- (1) Among the laws related to information security, the IT Basic Law specifies information security on advanced information communication networks in general terms, but the provisions of the law are not necessarily for enterprise information systems. Therefore, some point out that the Act on the Protection of Personal Information, which was enacted to harmonize the protection of personal information with its use, currently remains as the de facto "general law" for information security.
- (2) On the other hand, respective laws, including the Telecommunications Business Law, the Financial Instruments and Exchange Law, the Real Estate Registration Law and the Basic Resident Registration Law, specify how information should be protected from multifaceted and multipurpose approaches according to the purpose of each law. Occasions where protection of information is required are not necessarily limited to the cases that involve personal information, but vary widely from handling of state confidential information to prevention of falsification of corporate financial statements, and the interests to be protected are not uniform.

[Perspectives of the study]

As the ubiquitous network society will further develop, occasions are likely to increase where protection of information is required, from aspects that are more diverse. In light of that possibility, it is appropriate to discuss an integrated system framework further, wherever needed, from the perspective of information security by considering the diversity mentioned above.

2-3 Secure intellectual property rights

2-3-1 Copyright issues

- (1) The ubiquitous network society is a society that allows creation of various types of content and easy use of such content at people's requests.
- (2) In the meantime, content creation often involves multiple right-owners, which currently causes a problem of secondary use of content stagnating when the whereabouts of the right-owners are unknown. For example, when a TV station makes a DVD version of a program that it broadcasted in the past, it needs to obtain consent from the performers in the drama, as they are the owners of neighboring rights. However, it cannot make the DVD if the whereabouts of the performers cannot be ascertained. No system has been established to distribute the interests brought about by the secondary use appropriately.
- (3) In the ubiquitous network society where all Japanese are creators and users, it is assumed that creators would allow others to use or alter their works, or that cycles that produce new works based on such content would be established.
- (4) In anticipation of the ubiquitous network society, it is required to discuss a suitable copyright system for the new age.

[Perspectives of the study]

Specific discussions must be conducted by referring to the proposals made in [Reference 2] "Establishing a Viable Copyright System for the Ubiquitous Network Age (Draft Proposal)."

- 2-4 Establish systems and practices with Internet support
- 2-4-1 Issues of ICT use for legal information [New]
- (1) Enabling Japanese people to freely access legal information including laws, judicial precedents and Diet minutes is prerequisite for them to participate in democratic discussions and legal procedures proactively. Legal information has been provided by MIC's "Legal Data Provision System" and the National Diet Library's "Diet Minutes Query System."
- (2) However, legal information using ICT in the administrative, legislative and judiciary fields has not been provided in a user-friendly manner from the users' perspective; e.g., the history of amendments to a law is not presented in a user-friendly way. Some also point out that, under the current legal information management, different formats used by different institutions depending on the phase of the process from drafting to deliberation, promulgation, announcement, and revision or abolition are causing duplicate costs and inefficient operation.
- (3) For improved convenience, it is expected that legal information using ICT should be made easier to use and understand from the user's perspective and that the information related to the three powers of administrative, legislative and judiciary branches should be provided in an integrated fashion.

[Perspectives of the study]

Use of legal information should be promoted as an initiative of the entire country through accelerated standardization, such as organizing metadata on legal information while improving and enhancing existing systems.

Reference 1

Proposed Changes to "100 Issues" (December 2004)

Present	Proposed Revision
[1.Protect privacy]	[1.Protect privacy]
3) Cope with customer information collection	3) Cope with customer information collection
using Web sites, etc.	using Web sites, etc.
As personal information of an Internet user	"phishing" that exploits credit card numbers
might be collected without being noticed by the	by pretending to be an official web site of a
user by such means as cookies that are used to	financial institution and infection with virus that
understand the status of the user's Web site	arbitrarily sends information on a computer to
browsing, spyware that is secretly sent to	the outside, how to protect privacy is
personal computers, or "phishing" that exploits	
credit card numbers by pretending to be an	
official web site of a financial institution, how to	
protect privacy is a critical issue.	
[1.Protect privacy]	[1.Protect privacy]
10) Rules for using RFID tags	10) Rules for using RFID tags
Consumer's personal information, such as his	rules for using RFID tags are expected to be
preferences or a history of his actions, might be	a critical factor. Similar issues would be raised
collected against his intention with the	for introduction of monitoring cameras in the
anticipated introduction of RFID tags in diverse	public spaces including streets or use of the
fields including logistics, food, medical care and	advanced sensor network technology.
environment. Rules for using RFID tags are	
expected to be a critical factor.	[2 6
[2.Secure information security]	[2.Secure information security]
12) Cope with computer virus	12) Cope with computer virus
Appropriate measures should be taken for	greatly expand the scale of the damage.
viruses that infect computers via a network and	Measures should also be taken against recent
cause damage, including destruction of data,	issues, such as a "bot" that is installed on a
because of such characteristics as emergence of	computer without being noticed by its user so
new types of viruses one after another and always-connected broadband networks that	that a group of infected computers on networks would simultaneously be run under a common
could instantly greatly expand the scale of the	command from outside to launch a cyber attack
damage.	against a specific target, and "spyware" that is
damage.	difficult to differentiate from normally used
	programs.
	[New] Assure security for mobile terminals
	Assuring security for mobile terminals requires
	attention because increasingly sophisticated
	mobile terminals allow users to store personal
	information on the terminals and therefore

	magnifies the impact of data leakage.
[3.Establish an e-commerce infrastructure] 23)	[3.Establish an e-commerce infrastructure] 23)
Cope with malicious business practice using the	Cope with malicious business practices using
Internet	the Internet
Measures should be taken for billing fraud	or pyramid selling scheme. Especially, cases
where a user is suddenly billed unlawfully by an	of online shopping or a transaction for an
unheard of business operator for usage of a paid	Internet auction should be studied by taking into
Web site that he believes he has never used,	account the anonymity of the seller.
frauds in an Internet auction including bogus	
auction or sale of counterfeits, or pyramid	
selling schemes.	
[4.Cope with illegal and harmful content and	[New]
mischievous transmissions]	Cope with sender anonymity
	As a systematic response to sender anonymity, it
	is appropriate to assess the type of anonymity in
	question and study measures carefully by considering technical feasibility and viability,
	freedom of expression under anonymity, and
	relationship with privacy of communication in
	the cases where voluntary initiative by an
	administrator of an electronic bulletin board
	system is not sufficient as a countermeasure
	against illegal or harmful information and the
	anonymity of the sender is recognized as the
	cause.
[5.Secure intellectual property rights]	[5.Secure intellectual property rights]
45) Solve lack of content reuse	45) <u>Facilitate</u> reuse of content
As mechanisms for reuse and multiple use of	As the systems for reuse and multiple use of
content including TV programs are not fully	content including TV programs are not fully
established, a business environment for reuse	established, systems and conditions to facilitate
and systems and conditions for the environment	content creation and trading, including reuse,
should be established.	should be established.
[6.Establish a new social code of conduct] 60)	60) Rules for using robots
Rules for using robots	robots that ethically offend public order and
	morals could be developed.
	Under these circumstances, rules for using
	robots should be studied ahead of other
	countries by taking into account the issues
[10 F-4-11]:1	raised for the "special robot zone."
[10.Establish systems and practices with Internet	[10.Establish systems and practices with Internet
support]	support]
93) Improve e-government convenience	93) Improve e-government convenience
Although the drive to e-government has been	Although the drive to e-government has been
proceeding, some inconveniences should be	proceeding including enactment of the three
solved that are attributed to incomplete	laws on online administrative procedures, the
electronic application procedures; e.g., data formats or specifications for electronic	services are not necessarily provided from the
TOTHIALS OF SPECIFICATIONS FOR ELECTRONIC	user's perspective. Accordingly, the

progurament are not unified and attachments	commitment to further development of a
procurement are not unified and attachments	commitment to further development of e-
must be submitted by mail or brought in.	government is required to facilitate
	simplification of identity verification and
	electronic submission of attachments and
	accelerate electronic procurement procedures for
	the government.
96) ICT use in judiciary systems	96) ICT use in judiciary and legislative systems
Some regions that do not have sufficient lawyers	Electronic information and judicial precedent
strongly need remote access to legal services	information for judiciary services are limited,
including trials, lawyer consultation and judicial	and judicial practices have not been
precedent inquiry by using ICT. However,	computerized. Use of ICT is behind in the
overall use of ICT is behind in the judiciary	judicial field, where judges' use of e-mails or
field and e-Japan Strategy targets have not been	Web site browsing is restricted, as well as in the
set yet.	legislative field, where e-document formats are
	not unified among the relevant parties, causing
	duplicated costs and inefficient operations.
	[New] Provide useful legal information to the
	people
	In addition to digitization and networking of
	legal information in practice, opening legal
	information widely to the public and making it
	easier to access relevant information is required.
07) D (10T) 1: 1	
97) Promote use of ICT in medical care	97) Promote use of ICT in medical care
Since some regions do not have sufficient	which would lead to more sophisticated or
doctors and hospitals and strongly need remote	efficient medical services, and to promote
access to medical services by using ICT,	standardization, where necessary, and human
establishment of systems that allow full-scale	resources development.
remote medical care must be facilitated.	
Accelerated establishment of electronic medical	
records and receipts, which would lead to more	
sophisticated or efficient medical services, is	
also needed.	
[New] Use of guidelines	In reality, businesses are conducted without
	knowing of the existence of guidelines, as
	relevant laws and different guidelines exist
	separately. Therefore, a mechanism that allows
	an overview of the guidelines in a crosscutting
	manner and checking of the consistency
	between the guidelines and positioning of each
	guideline is required.
	gardenne is required.

Establishing a Viable Copyright System for the Ubiquitous Network Age (Draft Proposal)

The Study Group on Copyright System in the Broadband Age (members of which include Professor Tamai, Research Center for Advanced Science and Technology at the University of Tokyo, who is one of the members of the Study Group on Systems in Ubiquitous Network Society) has studied and discussed viable copyright system in the new age of the ubiquitous network society. Since clarifying the whereabouts of the rights upon use of a work is the most critical among various issues, we present the following proposal as a measure to systematically deal with the problem.

We propose that the Copyright Law be revised to extend the protection term of rights for a work where the whereabouts of the relevant rights are ascertained (e.g., from fifty years after the death of the author to eighty years after the death of the author) and effect the following:

- Establish a registration system to register information of the work and the relevant owners of the rights; and
- Expand the award system so that the cases in which the whereabouts of the registered owners of the rights becomes unknown would be subject to the award system.

<Background of the Issue>

In recent years, with the development of broadband connection, opportunities to use works have been increasing, as seen in the launch of Internet broadcasting and the diffusion of podcasting. These environmental changes could provide right-owners with new and expanded opportunities.

However, most of the video content currently distributed on the Internet is of overseas works such as Hollywood movies. Distribution of past Japanese programs is very limited.

That is partly attributed to the whereabouts of the right-owners: A work of video content involves many owners of the rights, and therefore use of the work is not facilitated if the whereabouts of any one of the right-owners cannot be ascertained while all the other right-owners consent to the use of the work. In such a circumstance, both the right-owners and the users are placed at a disadvantage.

Meanwhile, as opportunities to use works expand, there are calls to extend the term of protection from the perspective of protecting right-owners. The tem of protection for cinematographic works has already been extended.

The term of protection for works is stipulated to continue to subsist, in principle, until the end of fifty years following the death of the author. The term of protection for cinematographic works was extended from fifty years following the making public of the work to seventy years following the making public of the work by amendment to the Copyright Law in 2003. It is said, "A policy decision was made and concluded that it is reasonable to extend the term of protection to appropriately secure the interests of right-owners" because opportunities for secondary use of films that were produced or released in the past have been increasing.

The "Future Issues on the Copyright Law" compiled by the Copyright Committee of Cultural Council also states that "based on the global trend that agrees on the term of copyright protection as 70 years after the death of the author, extending the term of copyright protection from 50 years to 70 years after the death of the author should be discussed while considering the balance of the protection terms among all works."

However, even when the protection term is extended, a work's entry into the public domain is delayed by the extended period and use of the work is consequently hampered as long as any right-owner remains unascertained. Allowing such a circumstance to occur may not necessarily comply with the purpose of the Copyright Law that aims to "secure the protection of the rights of authors, etc., having regard to a just and fair exploitation of these cultural products, and thereby to contribute to the development of culture" (Article 1 of the Copyright Law).

As the opportunities to use works expand, it is important to clarify the whereabouts of the rights in order to secure them substantially while maintaining the balance with fair use of the works.

<Proposal 1: New Registration System>

In order to satisfy the demand for extended term of protection for rights related to works while securing fair use of the works, we would like to present a tentative proposal to extend the term of rights by using a registration system only in the case where the whereabouts of the relevant rights of a work are ascertained.

This proposal takes into account the example of "registration of the true name" provided in Article 75 of the current Copyright Law. In Japan, the author of an anonymous or pseudonymous work may have his true name (real name) registered with respect to that work, and the registered person is assumed as the author of the work as specified in Article 75. By making a registration, the term of protection for an anonymous or pseudonymous work will be changed from 50 years after

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¹ See Sakka, Fumio, "Copyright Law in Detail (Third Edition)," 395.

² See Copyright Commission of Cultural Council of Japan, "Future Issues on the Copyright Law," January 24, 2005 report, 2.

the work is made public to 50 years after the death of the author, the same as the term for a work released under a true name. This substantially extends the term of the copyright protection.

The term of protection of the right is 50 years after the death of the author (or 70 years after release in the case of a cinematographic work) in principle, or 50 years after the performer made the performance, 50 years after the release in the case of a phonogram work, or 50 years after the broadcast took place in the case of a broadcasting/wire diffusion work. The current registration system could be expanded to extend the term of protection (e.g., 80 years after the death of the author or 80 years after the performer made the performance) if information on the right-owners (holders of the copyrights or the neighboring rights) related to a work is registered when the work is created or when the term of protection expires.

By introducing this new registration system to clarify the whereabouts of the rights, it would become possible to protect rights and keep a balance with fair use of works while satisfying the demand for extended term of protection for works.

<Proposal 2: Award system regarding rights when the whereabouts of the registered right holders become unknown>

In introducing the "new registration system to clarify the whereabouts of the rights," we propose to use a reward system because it is necessary to get prepared for the cases where the whereabouts of the registered right holders become unknown.

According to Article 67 of the current Copyright Law, when it is difficult to obtain consent of the author "where a work has been made public" or "where it is clear that it has been offered to or made available to the public for a considerable period of time" because his whereabouts becomes unknown, the work may be lawfully used under the authority of a compulsory license issued by the Commissioner of the Agency for Cultural Affairs and upon depositing compensation corresponding to an ordinary rate of royalty.

This proposal suggests that the target of the award system be expanded, only for the works registered in the "new registration system," so that, when any right-owner of a registered work cannot be ascertained, the registered right-owners, whether owners of copyrights or neighboring rights, would become subject to the award system.

For your reference, the copyright law of the United Kingdom stipulates the handling of the right of unascertained performer (tribunal consent) in Article 190.

On expanding the target to include neighboring rights in the award system, the January 2006 report by the Copyright Committee of the Cultural Council of Japan concluded that "establishing

the award system for use of performance works seems to have issues to be clarified in relation to international treaties, and needs careful study."

However, considering that the United Kingdom, a signatory country to the international treaty, has the tribunal consent system for performers as owners of the neighboring rights, it is not likely that the treaty is the absolute barrier in introducing the award system for neighboring rights.

This proposal is to expand the award system only for the new registration system, but it may also be necessary to theoretically study expanding the award system in Japan for neighboring rights.

(Reference)

1) Registration system in Japan

Japan has a registration system to secure the safety of transactions in cases where copyright facts are made public or where a copyright is transferred³ (Articles 75 through 78-2 of the Copyright Law). Therefore, except for program works, registration cannot be made upon creation of a work, but with facts that the work is made public or the copyright is transferred.⁴ As of 2004, around 1,400 applications for registration have been submitted for copyright.⁵

2) Registration system in the U.S.A.

In the United States, the "registration serves to identify the work." As the Copyright Law specifies that "at any time during the subsistence of the first term of copyright in any published or unpublished work in which the copyright was secured before January 1, 1978, and during the subsistence of any copyright secured on or after that date, the owner of copyright or of any exclusive right in the work may obtain registration of the copyright claim by delivering to the Copyright Office the deposit specified by this section, together with the application and fee specified by sections 409 and 708. Such registration is not a condition of copyright protection," registration is not a requirement to protect a work (U.S. Copyright Law, Sec 408(a)). However, registration is a requirement to institute an action for infringement of the copyright (requirement for

³ See Agency for Cultural Affairs, ed. "Introduction to the Copyright Law", 2005 ed, Copyright Research and Information Center, 89.

⁴ See Agency for Cultural Affairs, ed. "Introduction to the Copyright Law", 2005 ed, Copyright Research and Information Center, 89.

⁵ See Copyright Commission of the Cultural Council of Japan, "Report by the Copyright Commission of the Cultural Council of Japan," January 2004, Chapter 2, II-2. The report refers to literary, performance, phonogramic, broadcasting and wire diffusion works as "works."

⁶ See Shirotori, Tsuunashige, "Introduction to US Copyright Law," 73.

⁷ See Yamamoto, Takashi and Masako Matsuda, trans, "Foreign Copyright Laws: U.S.A" on the Web site of the Copyright Research and Information Center.

an action) as specified, that "Except for an action brought for a violation of the rights of the author under section 106A(a), and subject to the provisions of subsection (b), no action for infringement of the copyright in any United States Work⁸ shall be instituted until registration of the copyright claim has been made in accordance with this title" (U.S. Copyright Law, Sec 411(a))⁹. Registration can be made at any time during the subsistence of the term of copyright (U.S. Copyright Law, Sec 408(a)).

In addition to registration as a requirement to file an action, the U.S. Copyright Law provides the following incentives for the copyright registration.

First, the certificate of registration made before or within five years after first publication of the work would constitute prima facie evidence of the facts stated in the certificate ¹⁰ and the validity of the copyright (U.S. Copyright Law, Sec 410(c)). ¹¹

Second, award of statutory damages or of attorney's fees would be made in principle¹² for infringement of copyright commenced after the effective date of its registration (U.S. Copyright Law, Sec 412).¹³

Because of the above registration incentives and the simple procedures¹⁴, the system is greatly used for business.¹⁵ This registration system contributes to identify copyrights more clearly in the United States than in Japan.

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⁸ The "United States work" in Section 411 of the U.S. Copyright Law is a work that satisfies the requirements specified in Section 101 of the Law.

⁹ See Yamamoto, Takashi, "Basics of the U.S. Copyright Law," 54. This is a quotation in literature as the current U.S. Copyright Law only defines that "United States work" is a prerequisite of action for infringement.

¹⁰ Information to be included in the application for copyright registration is the name and address of the copyright claimant, the title of the work, the year in which creation of the work was completed, and, if the work has been published, the date and nation of its first publication (U.S. Copyright Law, Sec 409).

See Yamamoto, "Basics of the U.S. Copyright Law," 54.

Excluding "an action brought for a violation of the rights of the author under section 106A(a) or an action instituted under section 411(b)" (U.S. Copyright Law, Sec 412).

¹³ See Yamamoto, "Basics of the U.S. Copyright Law," 54, and Shirotori, "Introduction to US Copyright Law," 74.

An application for copyright registration should include the necessary information (U.S. Copyright Law, Sec 409) and be submitted together with two complete copies of the work (Sec 408(b) of the Law) and an application fee (normally 30 dollars) to the U.S. Copyright Office. A certificate of registration is issued about three months from application. It is said that the examination for copyright registration conducted by the U.S. Copyright Office only "determines whether the material deposited constitutes copyrightable subject matter and the other legal and formal requirements of this title have been met" (See Shirotori, "Introduction to US Copyright Law," 75.)

¹⁵ See Yamamoto, "Basics of the U.S. Copyright Law," 55.

Outline of Study Group on Systems in Ubiquitous Network Society

1. Purpose

With the advancement of the ubiquitous network society, remarkable changes have been made in the socio-economical environment while new technologies and services have been emerging. Considering these changes of the times, the "u-Japan Policy Roundtable" held between March and December in 2005 picked 100 issues that could be current or future challenges with the changes in the environment. However, these 100 issues require uninterrupted reviews as to whether responses to these issues are appropriately secured in existing systems, and it must be noted that the positioning and situations of the issues change in conjunction with social changes. Various problems that have not been assumed under existing systems could occur in the course of diffusion of new technologies and services.

Based on these understandings, the study group will clarify the issues and discuss how to cope with these issues in order to respond promptly to the trend of the times in terms of systems for the future ubiquitous network society.

2. Name: The name of the study group should be "Study Group on Systems in Ubiquitous Network Society."

3. Agenda

This study group will study on the following agenda:

- (1) Environmental changes that are assumed to happen with advancement of the ubiquitous network society
- (2) New issues that might occur in conjunction with the environmental changes
- (3) Systemic issues that are assumed to be raised in relation to the new issues
- (4) Understanding issues on existing systems and future vision

4. Structure and Management

- (1) This study group is instituted as meetings organized by the Director-General of the Information and Communications Policy Bureau.
- (2) This study group consists of the members listed in the attachment.
- (3) This study group appoints its chair and vice chair.
- (4) The chair should be elected by mutual vote of the study group members. The vice chair should be designated by the chair.
- (5) The vice chair supports the chair, and calls and hosts this meeting in the absence of the chair.
- (6) Other matters necessary for management of this study group should be determined by the chair.
- 5. Period: This study group should have meetings during the period of February through August 2006.

6. General Affairs

The General Policy Division of the Information and Communications Policy Bureau should conduct general affairs of this study group in cooperation with the Institute for Information and Communications Policy.

Study Group on Systems in Ubiquitous Network Society: Members

	IBUSUKI	Makoto	Professor, Ritsumeikan University School of Law
	OHTANI	Kazuko	General Manager, Legal Affairs Department, The Japan Research Institute, Limited
	OKAMURA	Hisamichi	Attorney at law
	KISHIGAMI	Junichi	Director, NTT Service Integration Laboratories, Nippon Telegram and Telephone Corporation
	KOMUKAI	Taro	Senior Chief Researcher, InfoCom Research, Inc.
	TAMAI	Katsuya	Professor, Department of Intellectual Property, Research Center for Advanced Science and Technology, University of Tokyo
	TERADA	Shinji	Director, Strategic Planning Department / Executive Officer, Index Corporation
	HIRANO	Susumu	Professor, Graduate School of Policy Studies, Chuo University
	BESSHO	Naoya	Manager, Legal Department, Yahoo Japan Corporation
(Chair)	HORIBE	Masao	Professor, Chuo Law School
	YOKOYAMA	Tsunemichi	Attorney at law
	WAKIHAMA	Noriko	Announcer, Yomiuri Telecasting Corporation

(in the order of the Japanese syllabary)

History of Study Group Meetings

	Date	Agenda
First Meeting	February 21 (Tue)	O Key Issues (Draft)
		O Presentations by members
		O Current situation of spyware
Second Meeting	April 26 (Wed)	O Presentations by members
		O Major relevant systems in Japan and abroad
		O Systematic response in conjunction with
		environmental changes in the ubiquitous network society
Third Meeting	July 5 (Wed)	O Discussions on the Gist of the Report (Draft)