National Institute of Information and Communications Technology
Standardization Policy

I. Fundamental Concept

The National Institute of Information and Communications Technology (NICT) promotes the full spectrum of research and development (R&D) in ICT from basic to applied research with an integrated perspective, and thus promotes the advancement of Japan as an intellectual nation that leads the international community. Moreover, NICT forms close ties with the academic and business communities in Japan as well as with research institutes overseas and returns its R&D findings to society in a broad range of fields. In this way, NICT contributes to the creation of lifestyles that are affluent and safe, a society that is full of intellectual creativity and dynamism, and a world that values harmony and peace.

In recent years, while ICT use is expected to contribute towards resolutions of various issues our country and the international society face, NICT's R&D findings are more strongly demanded to be returned to society. Therefore, there is a necessity to rise to the challenge and sufficiently meet these demands with effective standardization measures. NICT seeks to achieve this by creating advanced technologies and promoting their corresponding standardization.

(1) The Objective of Standardization

The objective of standardization is not only for the production of technical standards, but also for the proposal of new concepts which NICT derives from R&D findings and advocates to be gradually and broadly accepted as common sense in society.

In addition to a solutions-oriented approach in standardization such as technology-driven standardization based on R&D findings, NICT promotes societal needs-oriented standardization in the fields of disaster prevention, medical and healthcare, environment, energy, and so on.

(2) The Types of Standards that NICT Develops

1. Standards for Conceptual Design: new concepts NICT advocates to be

broadly accepted as common sense in society

Fundamental concepts for a wide range of applications are created as a part of the R&D findings, such as architecture, primarily at the early stages of R&D. For new concepts, NICT should advocate common understanding among participants of forum activities, academic societies, and international standardization bodies and promote the concepts for broad acceptance by society.

2. Standards for Social Infrastructure Development: standardization necessary for providing public services that maintain social infrastructure

For R&D to build and maintain social infrastructure, such as ensuring safety and security and establishing time and frequency standards, standardization is necessary to provide public services, standard time distribution, fair measurements and evaluations, and so on. In the case a standard is not directly related to business in industrial sectors, NICT, of our own accord, promotes standardization in international standardization bodies.

3. Standards for ICT Systems: standardization necessary for systems developed for creating practical applications of products and services

For R&D in developing systems to create practical applications of products and services, NICT collaborates with industry and promotes the standardization of technologies produced at the development stage in international standardization bodies and standardization forums. Furthermore, to meet societal demands, NICT promotes needs-oriented standardization which utilizes its R&D findings and collaborates with industry in the activities of international standardization bodies and standardization forums.

II. Policy on the Promotion of Planned and Strategic Standardization
(1) Integrated and Systematic Promotion of R&D and Standardization

To effectively return R&D findings to society through standardization, it is necessary for NICT to decide upon a policy of standardization from the early stages of R&D. At the stage of drafting a plan for R&D projects, NICT clearly identifies the candidates to be standardized and promotes the standardization integrally and systematically as a part of R&D.

(2) Collaboration with Private Companies

When aiming to provide products and services based on standards to the market, NICT promotes standardization from the early stages of R&D while collaborating with private companies as the main body for providing products and services to the market.

(3) Collaboration with Foreign Countries

In order for R&D findings to be reflected in international standards and to be adopted by the global market, NICT promotes standardization and collaborates with R&D institutes or related entities of foreign countries from the early stages of R&D.

(4) Selection of Standardization Bodies and Related Organizations

There are many bodies and organizations for de jure standards, such as International Telecommunications Union, and de facto standards (forum standards). It can occur that de jure standardization bodies acknowledge standards immediately after being established in forum activities. Hence, NICT appropriately selects standardization bodies and related organizations in the promotion of standardization.

(5) Reflection of Intellectual Property Rights

In the establishment of standards, NICT promotes standardization from a standpoint appropriately reflecting NICT's intellectual property rights.

(6) Participation in Standardization Activities

NICT promotes standardization and related standard development activities, such as testing and investigating for preparation of standards, creating original drafts for standards, and taking on roles such as chairperson, rapporteur, etc. in conferences on standardization by building networks among all parties concerned, both within and outside of NICT.

Furthermore, taking into account the practical application of products and services (according to private companies and public institutes that utilize established standards), NICT cooperates with international activities for the launching of products and services. In these activities, NICT conducts demonstrative experiments in collaboration with industry and government

agencies. Also, NICT cooperates in the establishment of technical regulations based on law and the standards of the private sector and in the development and maintenance of guidelines for ensuring service operations, interconnectivity, and interoperability.

In addition, NICT is, as the sole public R&D institute in the ICT field, expected to take a neutral stance in contributing to standardization. NICT employees, as experts and specialists belonging to a neutral public institution, participate in and contribute to the activities of domestic and international standardization bodies and national councils.

(7) Evaluation of Efforts of Standardization Activities

NICT evaluates efforts of standardization activities whenever it is appropriate such as at the time of planning, launching, and terminating a R&D project. Moreover, based on those evaluations, NICT conducts reviews of the standardization activities and reflects the results on R&D project plans.

III. Policy on the Promotion of Standardization Activities

1. For the purpose of effective promotion of standardization activities conducted as a part of R&D, NICT builds and maintains collaborative relationships with domestic and international standardization bodies and actively cooperates in inviting and holding international conferences on standardization in Japan.
2. NICT promotes the cultivation of human resources for standardization such as developing personnel who will continuously participate in standardization conferences and who can coordinate with relevant persons both within and outside of NICT.