IT Policy Package - 2005 — Towards the Realization of the World's Most Advanced IT Nation — (Provisional Translation)

February 24, 2005 Adopted by the IT Strategic Headquarters

"To become the world's most advanced IT nation by 2005" —In order to achieve this goal set forth by the e-Japan Strategy in January 2001, the public and private sectors, with the IT Strategic Headquarters playing a central role, have been making an all-out effort for more than four years in implementing various measures, such as the development of communications infrastructure and the e-commerce market. As a result, Japan has made significant progress in the area of IT and has realized remarkable achievements. For example, Internet service in Japan is now the fastest and cheapest in the world, and Japan's e-commerce market has grown to become the second largest in the world after the United States in terms of its scale. On the other hand, where the use of IT in areas such as e-Government, medical services, and education is concerned, there still remains issues that need to be addressed in order to ensure that people can safely and genuinely have a real sense of the convenience that IT offers.

As we have entered the target year, we will need not to slow down but rather to give a final push to our efforts by the end of the year, from the point of view of users. In the meantime we will continue to undertake every effort to ensure that Japan will remain the world's most advanced IT nation. It is for this reason that we herein formulate our IT Policy Package - 2005 in order to further enhance our efforts mainly in those areas that are closely related to people, such as public services, medical services, and education, while at the same time overcoming the challenges brought on by IT. By executing this policy package in an expeditious manner on top of the already steady implementation of the e-Japan Priority Policy Program 2004, the IT Strategic Headquarters will work towards further promoting the utilization of IT and making efforts to realize a society in which people can have a real sense of the changes and benefits to be attained through IT.

1. Public Service

(1) Promotion of e-Government

a) Efforts to promote the use of online procedures that handle a large number of applications annually (more than 100,000 applications annually), procedures that are very frequently used by corporations, procedures for which online availability is in high demand by corporations, and other procedures (all related ministries)

i) Online availability of accompanying documents (MOJ, MOF)

With respect to the procedures that process a large number of applications annually (more than 100,000 applications annually), the online availability, omission, and elimination of accompanying documents will be examined for each procedure, and an appropriate policy for such procedures will be established. In particular, the procedures relating to certain registrations and national taxes, which are familiar to citizens and corporations, will be completed before the end of August 2005 and before the end of fiscal 2005, respectively. For those accompanying documents that can be made available online without any amendments to laws and regulations, the necessary measures will be implemented in order to allow online availability of such documents prior to the end of 2005.

ii) Reduction of processing periods and the lowering of fees through the use of online procedures (Cabinet Office and all other ministries)

As early as possible prior to the end of fiscal 2005, a decision will be made with respect to strategies for encouraging citizens and corporations to use online procedures through the reduction of processing periods and other means. Through such strategies, the public service costs relating to online applications can be reduced, which will be properly reflected in the fees charged to applicants. As a result, a fee will be established for each online procedure at a lower level than the fee set for the same procedure which is not processed online. At the

same time, a further reduction of fees will be examined for each procedure which already charges a fee that is lower online than the fee for the same procedure which is not processed online. Such a lowering of fees will come into effect upon the implementation of the aforesaid strategies (the procedures subject to fee reduction shall be those provided for in iv) below).

iii) Measures for realizing non-stop services that operate 24 hours a day for 365 days (MOJ, MOF)

In order to improve the convenience to applicants using the procedures for certain registrations, national taxes and deposits, strategies will be studied and conclusions will be drawn up during 2005 for promoting the development of non-stop online services that operate 24 hours a day for 365 days to process applications, while attention will be paid to the stable operation of online systems, operation status, user needs and operation costs.

iv) Formulation of an action plan (Cabinet Office and all other ministries) Before the end of July 2005, procedures that handle a large number of applications annually (more than 100,000 applications annually), procedures that are very frequently used by corporations, procedures for which online availability is in high demand by corporations, and other procedures shall be designated as procedures for the promotion of the online use. As soon as possible prior to the end of fiscal 2005, an action plan will be formulated and announced for the promoting of usage of the aforesaid procedures online on the basis of the Policy for Administrative Reform to Be Advanced (adopted at the Cabinet Meeting on December 24, 2004).

b) In addition to the efforts described in a) above, measures will be implemented that will accelerate the promotion of the online use with respect to the following procedures:

i) Registrations (MOJ)

- Systems will be implemented for online applications for commercial and corporate registrations at registry offices with priority given to those that process a particularly large volume of applications, and by the end of fiscal 2005 the systems will become operational at registry offices that cover approximately 60% and more of the number of applications. Similarly, a system for online applications for real estate registrations will be implemented at registry offices in order of the number of applications filed. Every effort will be made to ensure a smooth transition to the new systems for commercial and corporate registrations as well as real estate registration, while steps will be taken in order to realize online capabilities at all registry offices across the nation as early as possible before the end of fiscal 2008.
- A systems upgrade will be implemented by the end of fiscal 2005 that will enable a single request for verification of the validity of multiple registration identification data in order to improve the user-friendliness of the validity verification requesting system for registration identification data. This system will be implemented as a means to verify the identity of registration applicants as a result of the transition to online applications for real estate registrations.

ii) National taxes (MOF)

- With respect to the electronic application and payment of national taxes, measures have been implemented for e-Tax since February 2004 in order to increase the number of procedures that can be accessed (September 2009) and to extend hours of operation (November 2004). A further expansion of accessible procedures will be studied and a conclusion will be drawn up within 2005, after which time steps will be taken in order to make the online application of national taxes possible by the end of April 2005.
- At present, accompanying documents, such as detailed statements and appendices, can be transmitted online. By the end of 2005, the online availability, omission, and elimination of accompanying documents will be studied for each procedure and an appropriate policy will be adopted.
- A study will be carried out and a conclusion will be drawn up prior to the end of fiscal 2005 for the shortening of the period from the date that a commencement

statement necessary for using e-Tax is submitted until the time that electronic application actually begins, with a full understanding of user needs, operation costs, and other factors.

iii) Automobile ownership-related procedures (MLIT, NPA, and MIC)

- With respect to new automobile registrations, for which applications may be made online starting in December 2005, a digitalized one-stop service will be promoted with the goal of making online applications available across the country during 2007.
- New registrations, transfer registrations, alteration registrations, deletion registrations, and renewal inspections for used automobiles will be made available across the country as early as possible before the end of 2008.

iv) Deposits (MOJ)

 Online applications for deposits will commence at all deposit offices before the end of fiscal 2005.

v) Passports (MOFA)

- With respect to those prefectures which will begin processing online applications for passports, measures of publicity and public relations activities will be developed in fiscal 2005 onward in order to encourage people to use this service. In addition, necessary assistance will be provided in order to ensure that online applications for passports can become available in every prefecture as early as possible.
- c) Promoting the creation of systems shared by Cabinet Office and other ministries with a view to establishing e-Government (Cabinet Secretariat, MOF, MIC)
 Around the time that a budget for fiscal 2006 is requested, the required budgetary measures will be examined in order to allow systems shared by all government ministries and agencies to be efficiently developed and operated in earnest starting in fiscal 2006.

d) Conclusion of the FAL Convention and other measures aimed at the optimization of import/export and port-related procedures (MOF, MOJ, MHLW, MAFF, METI, MLIT)

i) Conclusion of the FAL Convention on Facilitation for International Maritime Traffic (tentative name) established in 1965

In response to the strong appeal that was made by import/export and port-related organizations, etc. to conclude the FAL Convention on Facilitation for International Maritime Traffic (tentative name) established in 1965, measures will be implemented in order to simplify procedures and standardize the application documents used by each related ministry in order to reduce the number of differences between national practices and the standardized practices that were set forth by the said convention to the level that is maintained by the other developed countries. Subsequently, the convention will be proposed to the 162nd ordinary session of the Diet and be concluded by the end of 2005.

ii) Online access to the standardized application forms used by each ministry

As a measure aimed at the optimization of import/export and port-related procedures, each government ministry or agency will prepare standardized application forms, of which those relating to port-related procedures will be processed online beginning in November 2005. In addition, for import/export-related procedures a new interface system will be implemented during fiscal 2004, which will enable a corporation to send data directly from its own systems.

iii) Measures aimed at the optimization of import/export and port-related procedures

Measures aimed at the optimization of import/export and port-related procedures, including those procedures that were not covered under the FAL Convention, shall be steadily promoted on the basis of a process chart (a future schedule concerning the simplification, etc. of port-related procedures such as the FAL

Convention) which was approved at the Meeting of Parliamentary Secretaries, which was held on November 16, 2004. At the same time, an optimization plan will be formulated as early as possible before the end of fiscal 2005.

- e) Promoting the utilization of open source software by the government

 To help promote the utilization of open source software by the government, a Basic

 Concept on Government Procurement relating to Open Source Software

 (Guideline) (tentative name) will be formulated in the early part of fiscal 2005

 primarily by MIC and METI under the Association of Chief Information Officers

 (CIOs).
- f) Optimization of operations and systems of independent administrative institutions (All related ministries)

In an effort to carry out the optimization of the information systems that are operated by independent administrative institutions, the ministries governing such agencies will, pursuant to measures that are implemented by the government, take necessary measures. As part of these measures, the ministries will include into their medium-targets execution of audits relating to the key operations and systems of these institutions, undertaking of a study of their reform potential, and the formulation and execution of an optimization plan. In addition, in order to ensure optimal operations and systems, these institutions will be urged to actively utilize the assistance of outside experts with technical knowledge relating to information systems and other matters.

g) Enhancement of the electronic offering of public information such as laws and regulations through an official gazette and other means (Cabinet Office and all ministries)

In order to increase the transparency with respect to the various activities undertaken by public agencies and to further promote the realization of accessible public administration, in particular, in reference to an official gazette which will play an important role as the country's official publication for the promulgation of laws and regulations, and other information, the Internet information that offers functions

provided by the National Printing Bureau, which is an independent administrative institution, will be further enhanced (addition of printing functions, etc.) effective from April 1, 2005. In addition, continued efforts will be made in order to ensure that the website of each ministry will offer basic information, such as a list of the laws and regulations which it governs, in full text, or a summary of each newly established or amended law and regulation, and other data that is easy to understand. Efforts will also be made in order to enhance and efficiently make available public information in accordance with an optimization plan, which will be formulated in the early part of fiscal 2005, for operations and systems relating to electronic offering of such information.

(2) Promotion of e-Local Government

a) Promotion of the use of online public services closely tied to the daily lives of local residents (MIC)

As early as possible prior to the end of 2005, a study will be undertaken on measures relating to improving convenience to local residents, such as enabling one-stop service from the portal site of a local public agency for accessing and requesting procedures relating to those public services that are closely tied to the daily lives of local residents, such as information on and the booking of public facilities, and requests for the collection of oversized garbage. These measures will be actively promoted.

Advanced local public agencies that utilize IT in order to improve convenience to local residents will be publicly disclosed. Providing information on the successful cases of these agencies to a broad range of people will promote the use of online public services that are in high demand by local residents in each local community.

b) Standardization and sharing of the operations and systems of local public agencies (MIC)

From the point of view of optimizing operations and systems through the standardization and sharing of the operations of e-Local Governments, operational reforms that utilize IT will be pursued while realizing a management with high

standards at low costs through the promotion of shared outsourcing, whereby the management of a shared processing center for the operations of e-Local Governments will be entrusted to the private sector.

At the earliest possible stage of fiscal 2005, all prefectures will have a structure that will be designed to facilitate the sharing operations among them, while each local public agency will pursue the building of an efficient e-Local Government by promoting shared outsourcing and other means.

c) Support for ensuring the accessibility of local public agencies and other public areas (MIC)

With respect to the web sites, electronic application services, etc. of local public agencies, etc., actual progress of addressing the accessibility will be monitored. In addition, a conclusion will be drawn up during 2005 after an evaluation method model and model systems for ensuring accessibility have been examined. The said conclusion will then be presented to local public agencies, etc.

d) Promoting the participation of residents in local public administration through IT utilization (MIC)

In an effort to promote the participation in local public administration of a wide range of residents, a study will be carried out on the role played by residents' participation in public administration through IT utilization, while the development of model systems, such as electronic meeting rooms and other means will commence in the early stages of fiscal 2005.

(3) Promoting the utilization of the shared infrastructure of e-Government and e-Local Government

- a) Promoting the utilization of the Public Certification Service for Individuals and the Basic Residential Register Network (MIC)
- i) By the end of fiscal 2005, a structure will be developed for qualified individuals, such as administrative scriveners and judicial scriveners, who act as an agent in

public administrative procedures, in order to verify the validity of the electronic certificates that are issued by customers. This move is aimed at promoting the online processing of administrative procedures by proxy.

- ii) In order to make the Public Certification Service for Individuals more easily accessible, regardless of location, new ways to utilize this service will be proposed during fiscal 2005, including the development and demonstration of model systems assuming that the systems are accessed through mobile telephone terminals, etc.
- b) Promotion of user-friendly system improvements (MIC)
 In an effort to make the electronic application system easy to use for anyone, including elderly people and people with disabilities, the information service system on e-Gov will be in compliance with the Japanese Industrial Standards (JIS) with respect to web content, and other information system improvements will be implemented during fiscal 2005 with a focus on keeping the system easy to use and to understand, as well as on other matters. In addition, local public agencies will be requested to implement similar measures.
- c) Active utilization of the Kasumigaseki Wide Area Network (WAN) and Local Government Wide Area Network (LGWAN) (MIC, Cabinet Office and all other ministries)

More active debates will be held at meetings of the committee of the government and local public agencies promoting the digitalization of public administration, while the Kasumigaseki Wide Area Network (Kasumigaseki WAN) and the Local Government Wide Area Network (LGWAN) will be utilized as a rule to serve as a network between government administrative bodies and local public agencies. Each ministry will incorporate a specific transition plan into a plan for optimizing networks within the ministries, the latter of which will be formulated as early as possible before the end of fiscal 2005, and will promote the sharing of administrative information among the government and local governments, and the efficiency of its operations.

d) Active utilization of terrestrial digital television broadcasting (MIC)

A system serving as the infrastructure for the offering of e-Government and e-Local Government services will be developed through the utilization of digital broadcasting terminals with a simple interface. In consideration of the outcome of a demonstration experiment that will be conducted of the system, model specifications will be formulated and publicly announced during 2005, while a study will be carried out and a conclusion will be obtained relating to strategies for promotion and dissemination of the system.

2. Medical Services

(1) Further promotion of IT utilization for medical services on the medical treatment fee system (MHLW)

A decision will be made before the end of fiscal 2005 with respect to a policy for the evaluation of the medical treatment fee system relating to IT utilization for medial services (electronic medical records, remote medical care, ordering system, etc.) which exist at medical institutions under the medical insurance system.

(2) Promotion of electronic and online processing of receipts submitted by medical institutions to screening and payment institutions

- a) Reduction of the introduction cost for the electronic processing of receipts
 - i) In order to promote the dissemination of a system for electronically processing receipts, a tool for converting into electronic processing codes will be developed and begun to distribute before the end of fiscal 2005. The conversion tool will be designed for hospitals which have already computerized a receipt system (MHLW).
 - ii) Steps will be taken in order to ensure open access to the receipt computer system before the end of 2005 and to promote the establishment of a standard

master to be featured on the system. At the same time, a basic shared database format will be established in order to create a multi-vendor structure with other systems in the same hospital (MHLW, METI).

b) Offering of incentives for the introduction of the electronic processing of receipts (MHLW)

A study will be carried out and a conclusion will be drawn up before the end of 2005 concerning the offering of incentives to medical institutions that take steps towards implementing the electronic processing of receipts.

c) Promotion and dissemination of online processing of medical bill claims (MHLW) Provided that security and other matters at medical institutions, as well as screening and payment institutions are ensured, online processing of medical bill claims will begin before the end of fiscal 2004 and measures will be implemented in order to promote the dissemination use of such procedure by making the public aware of the advantages, etc. of online processing of medical bill claims.

(3) Realization of the electronic processing of receipts submitted by screening and payment institutions to insurers (MHLW)

a) Electronic processing of receipts submitted by screening and payment institutions to insurers

Provided that it is ensured that the protection of personal information for insurers .etc are appropriately handled, submission of receipts by means of electronic data from screening and payment institutions to insurers will begin, as requested by insurers, before the end of 2005.

- b) Reduction of the burden of insurers relating to the response to the electronic processing of receipts
 - i) An environment will be established before the end of 2005 to make the viewing, etc. of electronic receipts easy for insurers.

ii) During 2005, instructions will be given to screening and payment institutions, as well as insurers to consider establishing the fees paid by insurers to screening and payment institutions according to the manner in which receipts are delivered from screening and payment institutions to insurers, provided that the expenses according to the manner of delivery for receipts are properly specified and reflected to the fees.

(4) Improvement of the quality of medical services through the effective utilization of receipt data, etc. (MHLW)

Given the digitalization of receipt data, research and study will be carried out and a conclusion will be drawn up before the end of 2005 concerning ways to effectively utilize medical data on receipts with the exception of personal information from the point of view of improving the quality of medical services, provided that it is ensured that the protection of personal information for insurers, .etc is properly handled.

(5) Promoting the introduction of electronic medical records

- a) Promoting the standardization of electronic medical records (MHLW, METI)

 Prior to May 2005, matters required for a standard electronic medical record, such as the types of information, the basic requirements for functions, etc., the standardization of terms and codes, and maintenance policies, as well as methods for evaluating the effect on medical services and the economic effects brought on by the implementation of a standard electronic medical record will be clearly defined. In addition, before the end of 2005 a basic interface based on the basic requirements for a standard electronic medical record will be designed and other measures will be taken in order to ensure the compatibility of such record.
- b) Reduction of the burden relating to the introduction and operation of an electronic medical record (MHLW)

A new program that introduces a web-based electronic medical record to the key hospitals in different regions will be launched in fiscal 2005 so as to provide assistance to medical clinics, etc. on the use of electronic medical records.

(6) Promotion of remote medical care

a) Development of human resources with an expert knowledge of remote medical care (METI)

A human resource development program will be prepared by the end of 2005 which will be designed so that management level staff can acquire knowledge of remote medical care, etc.

- b) Development of an infrastructure for remote medical care systems (METI) A technical infrastructure that enable consultations to be offered with respect to pathologic diagnosis for which there is a shortage of diagnosticians will be developed and strategies for the dissemination of such infrastructure will be formulated prior to March 2005. Steps will be then taken to promote the dissemination of such infrastructure.
- c) Promotion of the implementation of remote medical care system at public hospitals, etc. (MIC, MHLW)

A system and strategy to promote the design of a system that will allow public hospital, etc. to engage in remote imaging and pathologic diagnoses on regional public network will be established within 2005 with the goal to enhance cutting-edge medical services in remote areas, etc.

(7) Advancement of the collaborative utilization of medical information using IT (MHLW)

a) Early establishment of a public key infrastructure in the medical field

A certifying authority for a public key infrastructure (PKI) in the medical field, an electronic register of medical licenses, etc will be established before the end of fiscal 2005.

- b) Early realization of the digitalization of documents relating to medical services
 - i) In view of the outcome of a study to be released in May 2005 on a framework of a standard electronic medical record, an examination will begin in the early stages of fiscal 2005 of strategies, etc. for promoting the standardization of medical documents in order to realize the effective digitalization of documents managed in the medical field.
 - ii) On the basis of requests from patients, etc., and the protection of personal information, research will be undertaken in fiscal 2005 on the electronic sharing of information stated on prescriptions and other specific strategies that will enable related institutions to engage in proper network collaboration from the standpoint of promoting safety in medical services.
- c) Realization of the verification of insurance certificate validity when patients visit medical institutions under the medical insurance system

A study will be carried out and a conclusion will be drawn up during fiscal 2005 for strategies to promote the development of an environment that enables medical institutions operating under the medical insurance system to verity the validity of insurance certificates when an insured person seeks medical help at these institutions.

(8) Realization of ubiquitous heath care (MIC)

A research and development plan will be prepared during 2005, which will be implemented thereafter as soon as possible, relating to the development of systems that prevent medical accidents and manage medical materials, etc. through the use of ubiquitous medical technology employing electronic tags, sensor network

technology, etc. The plan will also include the establishment of an environment for operating the systems.

(9) Advancement of IT education for management level staff at medical institutions (METI)

A model program will be developed that will enable management level staff to grasp the relationship between the use of medical information technology and the operation of hospitals before the end of 2005. The plan will then be executed on a trial-basis, and the role and status, etc. of a chief information officer (CIO) will be examined, based on the trials.

3. Education and Human Resources

(1) Promotion of the digitalization of school education

a) Promotion of the improvement of the IT environment in schools (Cabinet Secretariat, MEXT, MIC, METI)

In order to accelerate the improvement of the IT environment in schools, which is indispensable for realizing effective education that employs IT utilization, before the end of fiscal 2005, the digitalization of schools, such as LAN within schools, will be aggressively promoted. This plan will include the following: 1) providing assistance to the Classroom Networking Movement (Net Day), which is organized in collaboration among local governments, private sector corporations and groups, volunteer groups, and other groups; 2) promoting the development and dissemination of various technologies that can be utilized for the networking of ordinary classrooms; and 3) making use of a variety of systems and businesses that can be useful for the same purpose.

b) Promotion of an information ethic education (MEXT)
In order to ensure that children will be able to take a proactive approach to the information society, effective teaching techniques for information ethics and manners will be studied during fiscal 2005 and actually implemented at model

schools. At the same time, steps will be taken to spread such teaching techniques through the preparation, distribution, etc. of instruction materials that are designed for teachers.

- c) Improvement and utilization of educational content (MEXT)
 An amount of data will be added again in fiscal 2005 by 20,000 for various educational content and educational support information made available at the National Information Center for Educational Resources. At the same time, in order to improve the convenience to the users of such contents, efforts will be undertaken to further upgrade their functions and to strengthen their operation. In addition, hands-on research will be undertaken for promoting the utilization of educational content.
- d) Adoption of IT utilizing ability as part of the criteria for the evaluation of teachers (MEXT)

In order to improve the instructions given on information, local public agencies will be urged to consider taking a positive approach to adopting IT utilizing ability as part of the criteria for evaluating teachers at public schools.

e) Promotion of the introduction of information-related subjects in university entrance exams (MEXT)

Universities will be encouraged to add information-related subjects, in accordance with the characteristics of each university, in the selection of their entrants. In addition, a study will be carried out during fiscal 2005 to clarify the terms for introducing information-related subjects in the National Center Test for University Admissions, in consideration of curriculum at high schools and the actual status of entrance exams held at each university.

(2) Development of advanced IT experts

a) Promotion of the nurturing of advanced IT experts and the establishment of a structure for nurturing them through cooperation among the government, academia, and industry (Cabinet Secretariat, MIC, MEXT, MHLW, METI)
In order to strengthen the global competitiveness of Japan's industries, a structure will be established before the end of fiscal 2005 through cooperation among the government, academia, and industry to ensure the nurturing of reliable advanced IT experts, in terms of both quality and quantity, who are in high demand in industry. A road map that covers the policy goals to be achieved and a specific schedule will be studied to clearly define a basic direction, while the following measures will be pursued:

i) Enhancement of education and training at universities through cooperation between academia and industry, and the utilization of the outcome (METI)

There will be more than 20 university education and training programs which will be provided by a hands-on IT education support project under the cooperative system between academia and industry, whereby industrial circles support educational institutions in studying and putting into practice educational improvements. In addition, the development of techniques for nurturing the skills gained and curriculums employed in these programs will be promoted, which will assist universities in proactively implementing necessary measures.

ii) Study and development of nurturing techniques for advance IT experts (MIC, METI)

In order to nurture human resources that can play a major role in strategic digitalization, the necessary curriculum and other nurturing techniques will be studied, and model educational materials will be developed.

iii) Standardization of skills (METI)

In an effort to strengthen the procurement ability of those in need of procuring IT, Procurement Skill Standards (tentative name) will be formulated during fiscal 2005,

which will systemize the skills that are required for procurement based on specific standards for IT skills.

iv) Expansion of job training to cultivate human resources which can lead the advanced IT society establishment (MHLW)

Ongoing pace-setting job training will continue to be undertaken in fiscal 2005, which is aimed at nurturing advanced human resources, such as highly skilled engineers and technicians in fields where IT is incorporated into manufacturing activities, advanced telecommunications engineers, and white-collared staff undertaking e-Business.

v) Building of a human resource nurturing model through cooperation between industry and academia, and the utilization of the outcome (MEXT)

A study will be carried out for the building of a useful human resource nurturing model centered on universities that will ensure highly skilled human resources through cooperation between industry and academia, beyond the organizational boundaries among universities or among industries and universities.

b) Nurturing of IT human resources through the utilization of open source software (Cabinet Secretariat, MEXT, MIC, METI)

In view of its educational effects, the active utilization of open source software at all universities and other such institutions will be encouraged in order to nurture IT human resources.

(3) Promotion of lifelong learning

 a) Offering of opportunities to anyone for upgrading skills at any time (METI, MEXT, MHLW)

An empirical model project will be launched during fiscal 2005 with the goal of designing a mechanism for a learning assistance system that utilizes e-Learning which will allow part-time workers, etc. to readily upgrade their job skills anywhere and at any time. At the same time, measures will be implemented that will establish

an environment for promoting the utilization of e-Learning through improvements made to the mechanism for providing information on e-Learning.

b) Examination of the functions of libraries as a local information hub (MEXT) In order to promote a variety of services, such as the offering of information relating to medical services, law, and business that is offered by libraries, which serve as a local information hub very familiar to local residents, the role of libraries in the future will be examined during fiscal 2005 and continued efforts will be undertaken to upgrade the abilities of librarians.

4. Lifestyle

(1) Ensuring of safety and security

a) Overcoming social issues such as forged credit cards and phishing brought on by IT

i) Strengthening of the coalition of all ministries in order to properly address the new social issues arising from the advancement of IT (Cabinet Secretariat and all related ministries)

In order to quickly and properly address the new social issues arising from the Internet, such as the distribution of illegal and harmful information and the problems associated with phishing, all of which arise from the advancement of IT, steps will be taken within government organizations to collect and share information within and outside of Japan and measures to address these problems will be examined. There will be efforts to ensure that these measures will be made known extensively to citizens, with the goal of realizing a safe and secure IT society.

ii) Promotion of measures against phishing (NPA, MIC, METI)

Effective measures against phishing, whereby personal information is obtained by fraud on the Internet, will be examined during 2005, while a framework that will

provide warnings to citizens will be designed. In addition, steps will be taken towards further reinforcing the on-going crackdown on phishing.

iii) Promotion of measures against spam mail (MIC, METI, NPA)

Measures against increasingly sophisticated and malicious spam mail will be further reinforced through the submission of a bill for a partial amendment to the Law on Regulation of Transmission of Specified Electronic Mail to the Diet in the early part of 2005 and through the promotion of measures, etc. under the aforesaid law and the Specified Commercial Transaction Law.

b) Promotion of IT utilization in disasters

i) Establishment of a structure to cope with large-scale disasters (MIC and NPA)

Steps will be promoted to establish effective Disaster Prevention Administrative Radio Systems for the sending out of warnings, etc. to residents in disaster-stricken areas, etc; a Digital Disaster Prevention Radio System, which is necessary in disaster-stricken areas, and a helicopter television receiver will be installed in areas under an urgent priority by March 2005; and efforts will be undertaken to install a helicopter television transmission system as well. Also, measures will be implemented in order to urgently install a helicopter television system with noctovision equipment, which is necessary for collecting information during nighttime, a disaster information collection and transmission system, which will enable to gather information and to send reports to local disaster headquarters even in areas where the transportation and communications systems have been disrupted, a global positioning system (GPS)-based position display device used by officials, etc. dispatched to the site of a disaster to check where they are located, and other such devices.

Furthermore, the facilities and equipment of the Fire, Disaster and Risk Management Center will be upgraded and expanded to make it possible to efficiently conduct an extensive support operation even if multiple large-scale disasters occur at the same time, and the digitalization of vehicle-mounted

satellite communications stations, which are owned by the Fire and Disaster Management Agency, will be undertaken.

ii) Efficient operation of the government's emergency measure support activities in large-scale disasters (Cabinet Office)

In order for the government to quickly build a support system in areas that are struck by large-scale disasters, a satellite communications system that makes effective use of IT, which enables direct and more efficient exchange of information relating to a disaster with local contacts, will be implemented in the early part of 2005. Furthermore, efforts will be made towards the early establishment of the same system in nine regions across the country so as to strengthen the system for the exchange of information relating to disasters with each region.

- iii) Expansion of cellular phone service coverage area for those regions designated as subject to earthquake disaster prevention management (MIC) With respect to the service coverage area for cellular phones, which play a critical role in disasters, support will be provided for the establishment of a mobile communications tower facility in those areas during fiscal 2004 in principle that have been designated by the government as subject to earthquake disaster prevention management.
- c) Establishment of an advanced food safety and security system that utilizes ubiquitous network technology (MAFF, MIC and METI)

 In order to facilitate the establishment of a highly developed food safety and security system which will cover a wide range of food products amidst the ongoing initiatives based on food traceability being implemented, steps will be taken in order to strengthen risk management during the food production and distribution processes and to undertake R&D for creating a system that offers a wide range of food product information to consumers. Efforts will be made to disseminate these measures one by one from fiscal 2005 onward.

d) Strengthening of immigration control, etc. through the utilization of biometrics technology (Cabinet Secretariat, NPA, MOJ, MOFA, and all other related ministries)

Passports that feature an integrated circuit (IC), which is in compliance with ICAO standards, will be introduced during fiscal 2005 for citizens of Japan, while biometrics technology will continue to be utilized for the verification of the automated gate system and other purposes in order to further speed up and tighten immigration checks and airport procedures. In addition, it is planned that a bill will be submitted to the Diet in 2006 for amendments to the Immigration-Control and Refugee-Recognition Act that will make it mandatory for foreigners entering Japan to be fingerprinted and photographed by immigration officials in order to prevent terrorists from entering the country. In anticipation of the submission of this bill, issues relating to the implementation of the proposed new system will be examined in 2005, while attention will also be paid to trends in various other foreign countries and issues relating to the protection of personal information.

(2) Improvement in the convenience and safety in movement of people and transportation

a) Measures towards the advanced Intelligent Transport Systems (ITS) (NPA, MIC, METI, MLIT)

i) Promotion of driver support systems for the prevention of traffic accidents (NPA, MIC, MLIT)

In an effort to increase transportation safety through the advanced ITS, on-going measures to improve the safety of automobiles will continue to be promoted. At the same time, in order to realize driver support systems which utilizes communication technologies, such as vehicle-to-vehicle communication and road-to-vehicle communication, as a measure against accidents that cannot be prevented by automobiles alone, pilot programs, R&D and other initiatives will be undertaken during fiscal 2005 for Driving Safety Support Systems, as well as Cruise-Assist Highway systems through cooperation among industry, academia,

and government. In addition, these measures will be undertaken based on a powerful framework, while at the same time overseas trends will be monitored and related information will be exchanged with other countries.

ii) Promotion of a dedicated short range communication (DSRC) system (MIC, METI, MLIT)

In order to facilitate the early realization of a variety of ITS services, such as payment of charges and fees at parking facilities and gas stations which employ a DSRC system, which is the system that is implemented for Electronic Toll Collection System (ETC), the formulation of a basic service menu will be studied through cooperation between the public and private sectors, and joint research will be promoted in order to establish standards and specifications during fiscal 2005.

iii) Promotion of the provision of highly accurate road traffic information (NPA, MIC, MLIT)

An infrastructure for gathering road traffic information will be established in order to make available more accurate road traffic information. In addition, in order to supplement the information obtained from such infrastructure, standards and specifications will be established during fiscal 2005 through cooperation among industry, academia, and government relating to the gathering of information (probe information) from automobiles that have been equipped with a vehicle information and communication system (VICS).

iv) Promotion of ETC (MLIT)

The use of ETC will be promoted through a variety of toll measures that are specially intended for ETC users and the implementation of Smart Interchange (interchange designed for ETC). Through these measures, by the spring of 2005 the rate of ETC use will be increased to nearly 50% of all users of toll roads.

b) Safe and efficient support for movement of people with disabilities, elderly people, and other persons (NPA, MIC, MHLW, METI, MLIT)

With the goal of creating an environment wherein all people can comfortably travel with peace of mind, continued efforts will be undertaken for the on-going development of pedestrian information and communication systems, etc. at intersections and other areas that are frequently accessed by people with visual impairment. At the same time, a demonstration experiment will be carried out during fiscal 2005 for a system whereby movement-related information can be provided or exchanged depending upon the need of users through communications between mobile terminals and electronic tags, etc. that are installed on road signs and navigation blocks.

c) Promotion of e-Passport (Cabinet Secretariat, NPA, MOJ, MOFA, MOF, METI, MLIT)

While the utilization of IC in passports will continue to be promoted, specifications for a passport authentication infrastructure and a reading device, etc. will be prepared and verified with a view to building a system that will be highly compatible on a global basis. In addition, the selection of essential functions, an examination of regulatory issues, technical verification, and considerations will be undertaken for the utilization of IC cards, etc. in general airport procedures in order to realize speedy and convenient procedures for immigration control, the check-in process, and other airport procedures while their safety and strictness are ensured.

d) Realization of a safe and efficient international marine container logistics (MLIT and other related ministries)

In order to realize the compatibility of increased security and efficiency in international logistics, an accurate understanding of cargo information and its efficient flow will be promoted through the utilization of IT such as electronic tags. In order to ensure this, a basic strategic direction and specific measures to be implemented, and their effectiveness will be verified in a demonstration experiment which will be carried out in fiscal 2005.

(3) Utilization of high speed communications over power lines in homes (MIC)

With respect to the impact of wave leakage from power line communications facilities on wireless communications and broadcasting, etc., steps will be taken to carry out an experiment of the technology for wave leakage reduction, and a technical study will be undertaken with the involvement of related parties in order to clarify the existence of practical problems during 2005.

5. e-Commerce

(1) Measures to address any remaining issues hindering the use of IT in business activities (Cabinet Secretariat and all related ministries)

The initiatives set forth below will be undertaken to promote the use of IT in business activities. In addition, progress on the reviewing of regulations relating to IT utilization in business activities will be fully checked by the end of March 2005 and efforts will be undertaken in order to resolve any remaining issues by the end of 2005 in view of the needs for such IT utilization in the private sector.

- Necessary measures under the current legal system will be implemented before the end of fiscal 2005 that will enable the exercise of voting rights, etc. by electronic means for general meetings of public interest corporations, non-profit mutual benefit corporations, and NPO corporations (Cabinet Office and MOJ).
- Necessary measures under the current legal system will be implemented before the end of fiscal 2005 that will enable the exercise of voting rights by electronic means for general meetings of credit associations (FSA).
- Necessary measures under the current legal system will be implemented before the end of fiscal 2005 that will enable the use of electronic means for banks to publicly announce their financial results and matters relating to trust operations and for insurance companies to release public announcements (FSA).

(2) Revitalization of small and medium enterprises through the utilization of IT

a) Support for partnerships among small and medium enterprises (METI) In an effort to encourage small and medium enterprises that have business resources in different industries to form new partnerships for creating high

value-added products, etc. through the utilization of IT and mutually complementing their strengths, support will be provided to small and medium enterprises participating in a cross-industry collaborated new business development plan approved under the Law for Facilitating New Business Activities of Small- to Medium-Sized Firms (tentative name). In addition, by the spring of 2005 a Regional Strategy Council for Supporting New Partnerships (tentative name) will be launched in each region in order to establish a support system.

b) Support for the undertaking of management innovation by small and medium enterprises (METI)

In order to facilitate the undertaking of management innovation by small and medium enterprises through the promotion of the utilization of IT, enlightenment and other initiatives for popularizing management innovation will be carried out by an IT management support group, which aims to increase its membership to 20,000 people by the end of 2005. In addition, the role of a CIO, a position that must be established in small and medium enterprises from fiscal 2005 onward, will be clearly defined and the necessary educational programs for nurturing a CIO will be created.

c) Development of an environment for fund procurement for small and medium enterprises (MOJ, METI, FSA, and all other related ministries)
An environment for funds procurement for small and medium enterprises, etc.
through the promotion of the transfer of credit rights by electronic means needs to be developed. In order to achieve this goal, a business model that utilizes transfer of credit rights by electronic means will be studied. In addition, a study will be pursued with the goal of enacting the Law Concerning Electronic Claims (tentative name), and the outline of such law will be released within 2005.

- 6. Information Security and Protection of Personal Information
- (1) Review of the role and functions of the government in terms of measures to address information security issues (Cabinet Secretariat)
 Development of a structure that centers on the IT Security Policy Conference

(Tentative) and the National IT Security Center (Tentative) as adopted in the Review of the role and functions of the government in terms of measures to address information security issues (December 7, 2004) will be urgently pursued, and activities will begin under a system that will be uniform and cross-cutting across the government. In addition, the Committee for Essential Issues on Information Security under the IT Security Expert Meeting will speed up the examination of any remaining information security issues.

(2) Promotion of personal information protection (Cabinet Office, FSA, NPA, MIC, MOJ, MEXT, MHLW, METI, and all other ministries)

In order to ensure that the Law Concerning the Protection of Personal Information (April 1, 2005) will be fully enforced, measures will be implemented that will reinforce public awareness about the current legal system and to promote the efficient handling of complaints in accordance with the Guidelines for the Protection of Personal Information (Decided by the Cabinet on April 2, 2004).

In addition, issues that are dealt with by the government as a whole will be sorted out and examined with respect to the role of the penalties associated with the leakage of personal information, in other words, the misappropriation or stealing of information.

(3) Promotion of measures relating to personal information and information security implemented by local public agencies (MIC)

All local public agencies will enact an ordinance relating to personal information protection and formulate an information security policy, while promoting the introduction of audits concerning information security.

In addition, a study will be carried out during fiscal 2005 for a mechanism, etc. for evaluating the level of information security that is maintained by local public agencies. Necessary support will be made available in light of the outcome of the said study. Through such support and other means, the measures implemented by local public agencies to address personal information protection and information security will be advanced further.

7. International Policy

(1) Prioritization of subject fields and partner countries in the IT international policy centered on Asia (Cabinet Secretariat and other related ministries)

In accordance with the Basic Concept on IT International Policy Centered on Asia (Decided by the IT Strategic Headquarters on September 10, 2004), Japan will designate subject fields and partner countries to which priority will be given in fiscal 2005 for its IT international policy centered on Asia, in light of the maturity of IT in each country, the potential for an IT collaboration with each country, etc. Japan will, through collaboration among all related ministries, collectively promote international cooperation for IT, work to build international standards that originate in Asia, as well as a model for utilizing IT, and engage in other measures. And, at the same time, it actively contributes to the establishment of an advanced information and telecommunications networks in the whole of Asia (see Reference).

In addition, Japan will play an active role in the design of an early-warning mechanism for tsunamis in the Indian Ocean.

8. R&D

In order for Japan to maintain its status as the world's most advanced nation in fiscal 2006 and beyond, it will be important to strengthen the country's efforts to engage in more cutting-edge R&D. Through its efforts to undertake cutting-edge R&D, Japan will work towards, among other things, creating new markets, improving the quality of life, and reducing burdens on the environment. At the same time, it is essential that Japan, as one of the main IT research centers in the world, provide opportunities for the world's highest level of researchers and engineers to play active roles.

To facilitate these goals, Japan will continuously engage in R&D relating to the basic technologies that support IT, such as mobile, wireless, optic, and device technologies, software engineering, electronic tags, and security, as well as in those fields that apply IT, while actively contributing to the building of a global IT

society through the promotion of a technological standardization that originates in Japan.

In addition to all of the above measures, those measures with high priority are summarized in the Appendix attached hereto.

1. Public Services

(1) Promotion of e-Government

a) Enhancement of the aide to the Chief Information Officer (CIO) at each ministry (Cabinet Secretariat, MIC, and all other ministries)

In an effort to more positively utilize the aides who possesses expert knowledge of information systems, etc., the CIO of each ministry, the Cabinet Secretariat and MIC, under the Association of CIOs, will take the lead in identifying and analyzing the past records of aide utilization at each ministry and study strategies for enhancing the functions of aides to the CIO. Upon the conclusion of such study, each ministry will implement the proposed strategies.

- b) Incorporation of open source software into general administration (METI) METI will use open software in order to build an environment for the use of IT associated with the general administrative tasks undertaken by its staff and apply this environment to other specific operations. In doing so, the METI will identify potential issues in the case of implementing open software into general administration and work out measures to address these issues by the end of 2005.
- c) Establishment of terms and techniques relating to the outsourcing of operations and systems for goods procurement, etc. (METI)

In order to enable each ministry to outsource based on its optimization plan, each operation and system relating to goods procurement, goods control, premiums and various allowances, subsidy, and travel expenses, the METI will implement measures relating to outsourcing and, by the end of fiscal 2005, summarize the outcome of these measures as the terms and techniques that will be used in arranging outsourcing.

d) Introduction of Project Management Office and others (METI)

In order to help formulate guidelines for the implementation of an optimization plan and guidelines for the evaluation of the implemented optimization plans, etc., the METI will implement, on a trial basis, the following: (1) Project Management Office, which will manage the process from the formulation of an optimization plan to the procurement of systems to the development of systems, then to the operation of systems; (2) Business Performance Indexing Model, which will be designed primarily to set up measurable indicators relating to information systems investment;, and (3) three types of Indexing Models relating to data, software components, and technologies, and which are used to extensively gather and analyze successful cases of private-sector corporations. The outcome of these trials will be summarized as guidelines before the end of November 2005.

e) Promotion of the provision of pension information online (MHLW)

Steps will be taken to promote a service that will provide responses on the Internet to inquiries about pension enrolment details and estimated pension amounts relating to the national pension plan and employee pension plans, provided that such information will be subject to a rigorous verification of the identity of pension holders. It should be noted that the Public Individual Certification Service System will be utilized to verify the identity of pension holders.

(2) Promotion of e-Local Government

a) Measures for promoting the online procedures of local public agencies (MIC and other related ministries)

The measures undertaken by local public agencies for making administrative procedures available online will be further advanced. For example, necessary assistance will continue to be provided in order to ensure that procedures such as the submitting of applications and notifications, which are the key procedures handled by local public agencies, will become available online as soon as possible by all local public agencies.

b) Engineering development of a next-generation regional information platform (MIC)

Engineering development will be underway during 2005 for a Next-Generation Regional Information Platform, a system-linking infrastructure which will help design one-stop services and a portal operated by collaboration between the public and private sectors, and reform the legacy systems of local governments, among other matters. Subsequently, steps will be taken to standardize system interfaces, system-linking technology, and other matters.

c) Promotion of the development of regional public networks and nationwide connections (MIC)

Assistance will be provided to local public agencies, etc. with the goal of realizing nationwide penetration of regional public networks, which will link schools, libraries, community centers, city halls, etc. through high-speed and ultra high-speed connections, before the end of fiscal 2005. In addition, in order to promote the building of a nationwide public broadband network by connecting various regional public networks to the prefectural information highway, necessary measures, such as the formulation of standard specifications for connections, will be finalized before the end of 2005.

d) Shared establishment and operation of public applications (MIC and other related ministries)

With regard to public applications relating to crisis management for disaster prevention, emergency situations, terrorism, etc., as well as for education, medical services, and other matters, the development of a disaster prevention application, which will be under way during 2005, and other standardized applications that should be implemented across the nation will be undertaken in sequence. In addition, the government and local public agencies will share the operation of these applications on public networks and actively utilize them.

e) Development of a regional digitalization knowledge base (MIC)

A knowledge management system, which is a shared knowledge infrastructure, will be designed and begin in operation before the end of 2005 in order to ensure the sharing of information through the aggregation of past leading-edge regional digitalization initiatives in the form of database.

f) Nurturing of a CIO for each local government (MIC)

For the purpose of nurturing a CIO for each local government who is capable of comprehensively overseeing initiatives, such as e-Local Government, legacy reforms, business process reengineering (BPR), and regional digitalization, training aids will be developed for system planning and project management in local governments, and other matters, and a seminar will be held during 2005.

g) Promotion of general support for regional digitalization (MIC)
In an effort to promote the settlement of regional issues from the standpoint of local residents, a hard/soft digitalization plan will be adopted and support will be extended to those projects that are in line with such plan in the early part of fiscal 2005. These measures will promote the utilization of IT based on suggestions proposed locally and establish an information and telecommunications infrastructure.

(3) Promotion of the utilization of the infrastructure shared by e-Government and e-Local Government

- a) Promotion of the utilization of the Public Certification Service for Individuals and the Basic Resident Register Network System
 - i) In order to promote the utilization of *the Public Certification Service for Individuals*, the information service system on e-Gov will possess a function that will enable the use of the said service before the end of fiscal 2005. In addition, the electronic application system of each ministry will be reviewed in response to the use of the information service system on e-Gov and necessary measures will be implemented, as a rule, before the end of fiscal 2006. Furthermore, these

measures will also extend to local public agencies, which will receive the necessary support, among other groups (MIC and all other ministries).

- ii) A final decision will be made as early as possible before the end of 2005 with respect to the introduction of an electronic certificate, which will be provided through the Public Certification Service for Individuals that will be used as an identification document for the opening of an account at financial institutions which are engaged in the designated certification services (MIC, MOF, and related ministries).
- iii) Municipalities will be requested to promote the use of the Basic Resident Register Card for multiple purposes. In addition, more ways to utilize the card, such as linking the card with health insurance certificates, will be examined at a much faster pace (MIC and related ministries).
- iv) A study will be carried out and a conclusion will be drawn up as early as possible before the end of fiscal 2005 with respect to strategies that will enable the use of the Public Certification Service for Individuals, in the electronic bidding system, so as to encourage individual business owners to participate in bids (MIC, MLIT, and related ministries).
- v) Efforts will be undertaken to promote the utilization of the Basic Resident Register Network System in line with the law. For example, the network can be accessed in order to confirm the current status of those people entitled to a government pension and employee pensions, and be used in the procedure for applying for real estate registration (MIC and all other ministries).

b) Active utilization of the Kasumigaseki WAN and LGWAN

i) As a rule, documents will be exchanged by electronic means between the government and local public agencies. After April 2005, the status of utilization of electronic document exchange between each ministry and local public agencies

will be surveyed and publicly released on a regular basis. At the same time, utilization of the Kasumigaseki WAN and the general administrative network (LGWAN) will be further enhanced by utilizing such surveys and other means (MIC and all other ministries).

- ii) A study will be carried out on data exchange techniques in order to efficiently promote the exchange of information between the government and local public agencies, and by the end of 2005 a data sharing system between the government and local public agencies will be developed. In addition, improvements in the operational efficiency for both the government and local public agencies will be promoted through the utilization of the Kasumigaseki WAN and the general administrative network (LGWAN) (MIC).
- c) Promotion of the standardization of character encoding and the operation of a database (METI and related ministries)

By the end of 2005, a database will be developed which will streamline and systemize overlapping characters between the standard characters for the Basic Resident Register Network System and the standard characters for the Koseki (family registers). In addition, the standard characters for registrations which are currently being developed will be consistent with this database before the end of fiscal 2006. Furthermore, specific methods for operating the database will be studied among the related ministries, with a conclusion to be drawn up as early as possible before the end of 2005.

d) Support for the development of a portal site operated in collaboration between the public and private sectors in anticipation of a demonstration of one-stop services for local residents (MIC, METI)

In order for local governments, key infrastructures and other private sector corporations to collaborate in centrally handling and processing all applications, requests, inquiries, etc. relating to lifestyle-related services in the public and private sectors, during fiscal 2005 a demonstration experiment will be conducted of a portal site that will utilize current technologies and be operated in collaboration between

the public and private sectors. The experiment will be based on the outcome of an examination of the said portal site with respect to the roles of personal information protection and personal certification, and consistency in each key piece of data. Subsequently, technical measures and other measures will be worked out before the end of fiscal 2005 for the development of one-stop services in the future.

(4) Promotion of the archiving of the digital content possessed by the government (Cabinet Secretariat and all ministries)

In order to further enhance the archiving of digital content of the government, etc. by utilizing measures such as the gathering of network-related digital publications by the National Diet Library and the building of a portal site for consolidating all digital archives, a basic policy will be drawn up during 2005 with respect to the building and operation of a digital archive for the government and others at a liaison committee of the ministries involved in the promotion of digital archiving.

2. Medical Services

(1) Promotion of the provision of multifaceted yet highly reliable information (MHLW)

- a) Promotion of the establishment of an environment in anticipation of the public release of outcome-based information such as the recovery rate
 In order to ensure that a variety of highly reliable information is provided to citizens and to help patients make necessary choices, in 2005 priority will be given to research, etc. relating to outcome-based indicators such as the recovery rate, etc.
- b) Promotion of the provision of medial information to citizens
 In fiscal 2005, the service that offers information such as medical treatment
 guidelines and related literature for 20 priority illnesses (such as acute myocardial
 infarction, gastric cancer, hypertension, etc.) that have been designated by
 academic conferences, etc. to promote evidence based medicine (EBM: medical

services based on evidence) will be upgraded to include the provision of information intended for general citizens, in addition to the information at present available only to medical service providers.

(2) Promotion of the collaborative utilization of IT-based medical information

a) Early realization of electronic storage of documents relating to medical services (MHLW)

Security guidelines will be prepared and publicly released before June 2005 for the storage of medical treatment records, etc. by electronic and external means and for security control measures for the medical information system based on the Law Concerning the Protection of Personal Information

b) Realization of an advanced network infrastructure that will ensure the security of medical information (MIC)

In order to facilitate the realization of a safe and efficient distribution of medical information, priority will be given to the undertaking of R&D and a subsequent demonstration experiment in fiscal 2005 for a technology that will build a network that will enable medical institutions to flexibly, freely, and easily engage in communication on the Internet at multiple points, while ensuring the protection of valuable personal information, such as medical treatment records, etc.

3. Education and Human Resources

(1) Promotion of the digitalization of school education

- a) Promotion of IT utilization in school administrative procedures (METI, MEXT) By the end of fiscal 2005, the effect of IT utilization in school administrative procedures will be clarified and a study will be carried out concerning the improvement of the IT environment for teachers.
- b) Increased recruitment of external human resources for the advanced IT utilization in schools (MEXT)

During fiscal 2005, steps will be taken to increase the recruitment of external human resources for schools in order to make the IT environment and educational content more advanced and to utilize them in an effort to improve educational effects.

c) Introduction of open source software into elementary and secondary education (METI)

In an effort to expand the range of options for the IT environment in elementary and secondary education, the adaptability and effectiveness of open source software which is used in the actual classrooms in elementary and secondary education will be studied during fiscal 2005. Based on the outcome of the study, where the said software will be tested on more than 1,000 school-aged young children and students, further improvements will be made to the environment in which open source software-based IT is utilized.

(2) Development of advanced IT experts

a) Establishment of a Professional Community (METI)

A Professional Community will be established by the end of fiscal 2005 for five types of job categories. In this community, project managers, IT architects, and other professionals who possess outstanding skills in these fields will provide cross-industry training and nurturing of younger workers.

- b) Early nurturing of advanced IT experts (METI)
- In order to facilitate the nurturing of advanced IT experts with a full understanding of the mechanisms of software, etc., during fiscal 2005, advanced IT education based on open source software as well as hands-on information security education will be provided primarily to young people who are under the age of 20.
- c) Promotion of the development of an environment that will enable highly-trained professionals to continuously upgrade their knowledge (All related ministries)

 The development of an environment that utilizes IT such as distance education will be promoted in order to enable attorneys, certified public accountants, chartered patent agents, judicial scriveners, certified public tax accountants, and other such

professionals who are required to possess advanced expertise to continuously improve their knowledge.

4. Lifestyle

(1) Securing of safety and security

a) Deployment of a disaster-prevention application that utilizes public networks among local public agencies, etc. (MIC)

Efforts will be made towards establishing a technology that will form a nationwide public broadband network through a demonstration experiment concerning connections between local public networks and prefectural information highways. A standard disaster-prevention application, which features motion images that can effectively utilize the said nationwide network, will be introduced on a trial basis during 2005.

b) Promotion of the utilization of terrestrial digital broadcasting in public services such as disaster-prevention (MIC)

Advanced utilization of terrestrial digital broadcasting in public services such as disaster-prevention will be promoted, and steps will be taken towards the practical application of broadcasting for mobile terminals likely by the end of fiscal 2005.

(2) Improvement of the convenience and safety in movement of people and transportation

a) Presentation of the world's most advanced ITS society at the 2005 World Exposition, Aichi, Japan

With a view to realizing the dissemination and the further development of ITS, the world's most advanced ITS society, which will feature the following initiatives, will be showcased at the 2005 World Exposition, Aichi, Japan:

i) Provision of a variety of services that utilize dedicated short range communication (DSRC) technology (MIC, METI, MLIT)

In an effort to promote the use of DSRC technology for multiple purposes, a demonstration experiment will be undertaken concerning the services made available by DSRC, such as the provision of information, control of entry and exit of vehicles for parking facilities, payment of fees, etc. In addition, a demonstration will be carried out wherein individual shuttle buses will be identified using a smart plate, which is equipped with an IC chip on a license plate.

ii) Signal control priority and operation management support for visitor transport buses, and the provision of real-time position information (NPA, MLIT)

A smooth flow of traffic will be ensured by giving signal control priority and operation management support to the buses which will transport visitors to and from the Expo, while assistance with bus route selection and real-time position information will be provided to passengers on the buses.

iii) Assistance will be extended in order to ensure the safe and efficient movement of people with disabilities, elderly people, foreign travelers and other persons (METI, MLIT)

Demonstration experiments will be carried out for systems such as a navigation system that will employ IT devices designed for people with disabilities, elderly people, foreign travelers, and other persons.

iv) Realization of a high-speed Internet using ITS (MIC, METI)

ITS-related information will be organically consolidated and linked to a cutting-edge high-speed wireless Internet environment in order to offer ITS services on the Internet.

b) Study relating to the role of a probe which will collect information from automobiles through the use of a variety of communications media (NPA, MIC, METI, MLIT)

During fiscal 2005, a study will commence, which may be carried out through cooperation among industry, academia, and government, with respect to the role of

a probe, which will collect information from automobiles through the use of a variety of communications media, such as a cellular phones.

6. Information security and personal information protection

(1) Information security

- a) Promotion of anti-cyber crime and anti-cyber terrorism measures (NPA) In order to further strengthen anti-cyber crime and anti-cyber terrorism measures, steps will be taken during fiscal 2005 to promote measures that will address new technical threats, such as a bot net (a network which is comprised of a group of computers that have become infected with a program (bot) which operates on orders given by the attacker, and a command server which transmits orders from the attacker), and to implement the structural reinforcement of global cooperation for investigation among other things. At the same time, measures will be implemented in order to enhance and upgrade necessary equipment, supplies, and devices to ensure a further advancement of the Internet observation system among other things. In addition, seminars will be held for individuals who are involved in these issues in an effort to share the necessary information to address particular cases, as well as to nurture human resources.
- b) Promotion of nurturing human resources with an ability to adequately forestall cyber crimes and cyber terrorism and to prevent the spread of these damages (NPA)

In order to develop human resources who are capable of implementing adequate anti-cyber crime and anti-cyber terrorism measures, information security seminars, exercise training, etc. will be actively provided to those individuals involved in these issues in order that they may acquire the technical skills and knowledge necessary for forestalling and preventing the spread of damage caused by cyber crimes and cyber terrorism.

c) Promotion of nurturing of information security experts (MIC)

With the goal of nurturing information security experts who can prevent the spread of damage caused by computer viruses and cyber attacks, as well as information leakages, etc. as a result of unauthorized access to computers, hands-on training with demonstrations will be promoted during fiscal 2005.

d) Promotion of information security measures implemented by corporations (METI) For the purpose of enhancing information security measures implemented by corporations, a benchmark for information security measures, which indicates an adequate level of measures, a model for an information security report, which contributes to the disclosure of information by corporations, and guidelines used for formulating a business continuation plan will be established, and efforts will be made to disseminate these measures during fiscal 2005.

Abbreviations of Ministry and Agency Names

FSA: Financial Services Agency

MAFF: Ministry of Agriculture, Forestry and Fisheries

METI: Ministry of Economy, Trade and Industry

MEXT: Ministry of Education, Culture, Sports, Science and Technology

MHLW: Ministry of Health, Labor and Welfare

MIC: Ministry of Internal Affairs and Communications MLIT: Ministry of Land, Infrastructure and Transport

MOF: Ministry of Finance

MOFA: Ministry of Foreign Affairs

MOJ: Ministry of Justice

NPA: National Police Agency

Priority Measures relating to the IT International Policy Centered on Asia in fiscal 2005

In accordance with the Basic Concept on IT International Policy Centered on Asia (Decided by the IT Strategic Headquarters on September 10, 2004), Japan will implement its IT international policy, with a priority given to those areas described below. With respect to the projects undertaken in any of the subject fields and partner countries, Japan will give full consideration by, for example, ensuring that they are given priority under the assistance of the government, including the utilization of public funds.

1. Basic Concept

From the standpoint of promoting IT across Asia, Japan will place a focus on the building of a secure and low-cost network infrastructure, the development of systems that contribute to improvements in the economy, industry, society, everyday life, among other things, and the nurturing of human resources that will foster a common IT base in Asia. In addition, Japan will focus on the building of systems that contribute to facilitating the flow of people, goods, money, services, and information in Asia and to strengthening economic partnerships within the region.

As far as partner countries are concerned, Japan will take into consideration the situations of each country, such as the extent of economic interchange with Japan, geographical factors, IT maturity and the potential for IT partnerships, and prioritize these countries in accordance with the objectives of the measures. In view of the foregoing, the following measures will be undertaken:

- With advanced IT countries which have advanced their IT infrastructure development and IT utilization, or possess advanced IT human resources and technologies, Japan will promote high-level cooperation, such as the

- promotion of various international standardizations in the IT field, cooperation in R&D, and joint development of applications, etc., in order to contribute to the building of an advanced IT society originating in Asia.
- With those countries where efforts have been undertaken to actively promote IT utilization in urban areas as IT infrastructure continues to develop in line with the IT advanced countries, despite the challenges that remain in rural areas with respect to the development of IT infrastructure, etc. Japan's cooperation will focus primarily on the development of an IT base that will allow the benefits of IT to be widely distributed to citizens, as well as the building of IT systems in the area of public services, such as e-Government, disaster-prevention, and distance education, etc.
- With those countries which have not shown much progress in the development of IT infrastructure, including a domestic backbone network, etc. or in terms of IT utilization, Japan will promote cooperation with a priority given to the development of IT base, such as network infrastructure and IT human resources. In addition, Japan will promote its cooperation with respect to the policies and systems surrounding IT.

By promoting its IT international policy with a priority given as described above through pace-setting and positive measures, Japan will make an active contribution to the building of an advanced information and telecommunications network society in the whole of Asia.

2. Prioritization of subject fields and partner countries

Japan will continue to promote its medium-term IT international policy, which includes the Asia IT Initiative, and the Asia Broadband Program, while determining important subject fields and partner countries which should be given priority in fiscal 2005 as follows. In addition, in light of the improvements being made in the official development assistance (ODA) system and its operation, Japan will also make an effort to form projects smoothly in the developing countries in the IT field.

In addition, Japan will promote the formation and implementation of projects in a comprehensive manner, while advancing collaborations among ministries, collaborations between the government and organizations implementing projects, and dialogue with the governments of partner countries, etc. In doing so, Japan will endeavor to maximize the effects brought on by the IT international policy.

(1) China and Korea

China, despite facing the digital divide within the country, has already reached an advanced stage in terms of informatization through the success of its IT industry, etc. In addition, Korea is already a world-class advanced IT nation in the areas of hardware and broadband usage. In view of the foregoing, Japan will, through encouraging cooperation in IT between China and Korea at a high level, promote measures towards the building of an advanced IT society originating in Asia.

To achieve such objective, Japan, in cooperation with China and Korea, will promote joint experimental trials and international standardization for the building of an advanced and high-speed network. To be more specific, Japan will cooperate with China and Korea in the promotion of globally advanced measures, such as cooperation in an experimental study of IPv6-related devices and promoting their use; cooperation in R&D and international standardization relating to next-generation mobile communications and electronic tags; cooperation in matters relating to digital broadcasting and information network security; and R&D, promotion of use, and international standardization of open source software (OSS).

While IT utilization continues to progress, both China and Korea are facing with pressing issues, such as the handling of intellectual property rights on digital content including pirated products, as well as measures for addressing cybercrimes. From the standpoint of the infringement of intellectual property rights of Japan and other countries caused by pirated products, etc. and the prevention of cybercrimes, Japan, China, and Korea will promote, among other things, the exchange of information through discussions on copyrights and cooperate with each other in undertaking training and enlightenment activities relating to copyrights. The three

countries will also promote technical cooperation in the investigation of and the exchange of information on cybercrimes, as well as other related measures.

(2) Southeast Asia region

The region of Southeast Asia has close ties to Japan in political, economic, and social aspects. The smooth exchange of people, goods, money, services, and information within this region contributes significantly to the economic and social development of not only Japan and ASEAN but the entirety of Asia. In view of the foregoing, Japan will promote bilateral and multilateral international cooperation.

Singapore has become one of the most advanced IT nations in the world, particularly in terms of the utilization of IT, and at the same time it plays an important role as a testing ground for cutting-edge IT measures. For this reason, Japan's cooperation with Singapore will take place within the sphere of innovative IT wherein Japan's advanced IT technology can be in sync with Singapore's mobility. Examples of such cooperation include the international standardization of IC cards, electronic tags, and wireless communications technologies. Further cooperation between Japan and Singapore will develop the applications such as distance education, remote medical services, and e-commerce, and the two countries will work to build Asian-developed models of IT utilization.

Malaysia, despite challenges that remain in the countryside with respect to the development of infrastructure, has developed within its urban areas an IT base that is by no means inferior from a global perspective. In addition, global IT firms have steadily expanded into Malaysia. Against this background, Japan's cooperation with Malaysia will focus on the promotion of models of IT utilization in the areas of education and public services, international standardization, and the nurturing of IT human resources.

With respect to Indonesia, the Philippines, Thailand, and other nations, Japan will promote the active provision of its own IT technologies and systems. In

particular, Japan will cooperate with these countries in, in addition to the nurturing of advanced IT human resources and the development of IT base in rural areas, the building of systems in the field of public services, such as distance education, remote medical services, disaster surveillance systems, agricultural assistance, e-Government and e-local government, that contribute to the safety and advancement of social and economic life. In order to realize such cooperation, Japan will promote a dialogue between public and private sectors and make an effort to form specific projects that can be implemented.

In these countries, the use of IC cards has begun in the field of transportation and for border crossing permits, and e-passports, among other things. By cooperating with these countries in fields where IC cards are utilized, Japan will be able to facilitate the smooth movement of people within the region and contribute to international standardization in these fields.

Cambodia, Laos, Myanmar, and Vietnam are all facing with the pressing issue of solving the digital divide. In an effort to provide positive support for the measures relating to the building of an IT society in ASEAN, Japan's cooperation with these countries will be focused on promoting the nurturing of human resources and the closing of the digital divide. These measures will include the development of network infrastructure and the nurturing of IT human resources through IT training facilities, etc. In addition, given the fact that these countries lack the officials in charge of policies relating to the development of IT base, it is essential that Japan provide assistance for the nurturing of those officials who can take the lead in building an IT society in each country. To help achieve this goal, Japan will promote the nurturing of human resources by inviting individuals to Japan for training, etc.

Of the above mentioned four countries, Vietnam has achieved substantial developments in IT. In this regard, Japan will promote the nurturing of advanced IT human resources to pave the way for the self-sustainability of Vietnam's IT industry and provide cooperation with the core IT education facilities of the country. To be more precise, Japan will promote a project for nurturing advanced IT human resources through collaboration among industry, academia, and the government of Japan, as well as higher education institutions of Vietnam. It will help promote the

comprehensive development of human resources, including the awarding of Japanese academic degrees through studying abroad. In addition, measures will be implemented in order to improve the accessibility of networks and to assist in the building of systems in the field of public services, such as e-Government, distance education, among other things. Furthermore, steps will be taken to ensure cooperation between Japan and Vietnam for the nurturing of IT human resources in Cambodia and Laos.

With respect to Cambodia, Laos, and other nations, Japan will provide assistance primarily with the building of a network backbone infrastructure, with particular attention paid to the building of a backbone network that connects major cities and line connections to overseas networks. In extending such assistance, full consideration will be given to the potential of such infrastructure to be proactively and independently operated in these countries.

The above-mentioned countries such as Cambodia, Laos, Myanmar, and Vietnam, are located in the Mekong region. The closing of the digital divide existing in this region and the promotion of the development of base in the same region to pave the way for economic growth and expansion will be crucial for the development of Asia as a whole. In order to achieve such a goal in an effective manner, Japan will, in addition to individually implementing measures for each country, form a partnership with Thailand, which has promoted economic growth most in the Mekong region, and undertake measures in order to promote the development of IT in the region, in light of the Mekong Region Development that was proposed at the Japan-ASEAN Commemorative Summit Meeting in December 2003. Specific measures to be undertaken will include cooperation in the field of open source software (OSS), cooperation in localization and natural language processing, among other things.

(3) Other regions

While India figures prominently in the global software market, the volume of software trade with Japan has remained low. In order to improve this and to

promote IT-related cooperation between Japan and India, Japan will promote a policy dialogue and the exchange of information between the two countries on a regular basis, as well as the sharing of information and exchange programs for facilitating interactions between the two countries' respective IT industries. In addition, cooperation will be extended to promote R&D as well as international standardization in the field of IT.

In Pakistan, Bangladesh, Mongol, and many other parts of Asia, there has been very little progress made in the development of IT infrastructure for domestic backbone networks and in IT utilization. As such, Japan's cooperation with these countries will be focused on the IT base, including infrastructure and human resources. In addition, given the fact that these countries do not have sufficient officials who are responsible for policies regarding the development of IT base, it is essential that Japan provide assistance for the nurturing of those officials in charge of policies who can take the lead in building an IT society in each country. To help achieve this goal, Japan will promote the nurturing of human resources by inviting individuals to Japan for training, etc.

(4) Multilateral cooperation

It is essential that Japan promote cooperation among multiple nations within the region of Asia in order to pave the way for the development of an environment that will enhance the information flow within the region of Asia and to other regions. For this reason, Japan, while utilizing the schemes employed by international organizations, will pursue multilateral cooperation in a wide range of areas, such as the development of IT base, such as network infrastructure and IT human resources, the ensuring of international standardization and interoperability, application developments such as distance education and remote medical services, the promotion of OSS utilization, protection of intellectual property rights, and the enhancement of anti-cybercrime measures, etc. In these areas, Japan will undertake measures in fiscal 2005 with a priority given to the following areas as those issues that need to be urgently addressed.

a) Promoting the nurturing of IT human resources

Japan will continue to promote cooperation in Asia with respect to standards for the skills of IT engineers and will form the base for mutual interaction between IT human resources. In promoting such cooperation with advanced nations, Japan will promote the mutual exchange of IT skill standards. In addition, for cooperation with developing nations such as Vietnam, Japan will promote the nurturing of human resources on the basis of the aforesaid standards. Japan will also implement measures for the nurturing of advanced IT human resources through international joint research, etc.

b) Promotion of open source software (OSS)

Measures will be implemented for the advancement of OSS, etc. in Asia in view of closing the digital divide, nurturing human resources, and avoiding reliance upon specific technologies, etc. In implementing these measures with the advanced IT nations, measures will be implemented with a focus placed on the establishment of an environment that will facilitate joint technological developments in the private sector, etc. and the promotion of international standardization. From the point of view of advancing the use of OSS in the developing nations, etc, Japan will provide assistance, among other things, for the nurturing of human resources and localization. In addition, Japan will make an effort to develop an environment for advancing OSS by hosting an international conference relating to OSS on a regular basis, in which the various Asian nations will participate, and implementing other measures.

c) Spreading of e-Passports

Based on the outcome of the collaborative demonstration experiments carried out in Japan in connection with the IC passport scheduled to be introduced to the country in full swing in 2005, Japan will work to spread its e-Passport technology in Asia, which will in turn contribute to the more efficient movement of people in Asia.

d) Cooperation in R&D

Japan will promote R&D and demonstration experiments in the fields of IPv6, multi-language translation and multi-language processing technologies, distance education and remote medical services, among other things, while developing the exchange of information and people in the field of R&D.

- e) Promotion of cooperation in the protection of intellectual property rights

 For the purpose of developing an environment that can contribute to the sound
 growth and progress of the software and content industries at home and abroad,
 Japan will promote cooperation in enlightenment and education relating to the
 protection of intellectual property rights by hosting seminars and other means. At
 the same time, Japan will also promote the collaboration with international
 organizations, such as the World Trade Organization (WTO) and the World
 Intellectual Property Organization (WIPO).
- f) Promotion of cooperation relating to information security and cybercrime countermeasures

Japan will promote the exchange of information relating to measures concerning information security and cybercrimes, both of which have become issues beyond national boundaries, while taking steps to nurture engineers who will be able to address these issues.

g) Promotion of the building of a disaster information network and a warning system

Japan will support the building of a network that will speedily transmit information on disasters in the Asian region. Japan will also assist in the building of a warning system which will utilize the country's know-how on earthquakes, tsunamis, etc. In particular, Japan will actively make contributions to the building of an early-warning mechanism to detect tsunamis in the area of the Indian Ocean by providing support in the designing of an information transmission network within each country in the region, and other measures.

(5) Other

a) Common IT indicators

The building of an IT society in Asia and even in the world will require common indicators which can measure the maturity of such society. However, at present such common indicators do not necessarily exist in Asia, and in fact data released by international organizations and research companies, etc. is frequently used. In this regard, in a preliminary step toward the study of an e-Asia Strategy which is shared across Asia in view of the IT strategy of each country, Japan will make an effort to foster opportunities to examine the creation of common IT indicators in Asia.

- b) Measures and their outcome of the IT strategy of Japan, and the provision of the know-how gained through such strategy
 Japan will engage in presentation activities, which includes presentations to each country, in an extensive manner of the measures that have been promoted by
 Japan on the basis of the e-Japan Strategy, as well as the achieved outcomes of
- Japan on the basis of the e-Japan Strategy, as well as the achieved outcomes of these measures. In addition, Japan will contribute to the formulation of an IT policy for each Asian nation and, as necessary, will send human resources to each nation.
 - c) Presentation at the 2005 World Exposition, Aichi, Japan
 Japan will take advantage of the 2005 Expo in Aichi, Japan, which will be hosted
 by Japan, in order to help each Asian nation and others better understand
 Japan's cutting-edge technologies.