

Compendium of Japan's Approach of e-Government

Project description (Background)

It was in November 2000 that the “Basic Law to formulate an Advanced Telecommunications Network Society (ICT Basic Law)” was enacted in the national Diet. Aiming to develop policies to build an advanced ICT network society, the purpose of the law is to respond to a dynamic change in socio-economic structure on a global scale. The law established the so-called “ICT Strategy Headquarter”, headed by the Prime Minister and comprise the cabinet Ministers and external experts. Its role is to hammer out strategies and set a target year.

In January 2001, the ICT Strategy HQ adopted the “e-Japan Strategy”, which envisaged Japan becoming the world’s most advanced ICT nation within 5 years. 5 priority policies were specified; “Promoting administrative reform through wide use of ICT in the public sector” is featured in the strategy. Others include: world-class advanced ICT network, education and human resources, e-commerce, and security and stability in the network. The “e-Japan Strategy” is a current master plan of e-Government in Japanese Government. Special priority was set on maximising convenience for citizens, as well as simplifying administrative operations.

To this end, a “Program for Building e-Government” was adopted in 2003. This program, stating both basic principles and concrete measures, provides the basis for the ongoing e-Government initiatives.

Objectives

Two goals set by the Program, i.e., realizing user-oriented administrative service and budget-efficient administration, are sought through the threefold channel of objectives, as follows:

- (1) Providing better services to the Public: Provide services and information through user-friendly one-stop portal on the Internet for 24/7. It is necessary to remove legal and other barriers for getting administrative services online, and to fortify measures of security for online transactions.
- (2) Renovating Business Processes and Systems: Drastically review to streamline and outsource current operations and systems for cross-government solutions in areas such as personnel and pay.
- (3) Developing Infrastructure for e-Government: Recruit external experts as Assistant CIOs at ministries, in addition to deployment of PCs and set up of LANs and the WAN connecting them.

Impact

(1) Providing better services to the Public.

The “e-Japan strategy” of 2001 envisaged, among other things, that G-to-C and G-to-B administrative procedures going online, making a commitment to treating digital information equal to paper-based information.

As of March, 2005, about 14,000, i.e. 96% of the targeted national administrative procedures can be conducted and completed online including such areas as real estate registration, national taxation and social insurance. Several legal and technological initiatives have been put into effect for this purpose.

<Online Administrative Procedure Law>

A new law was enacted in 2003 concerning the use of ICT in administrative procedures: i.e., so-called “Online Administrative Law.” Legal traditions have long presupposed the principle of “document-based public administration”; which by definition precludes online and therefore “paperless” transaction of administrative procedures. The law of 2003, however, removed all the legal barriers for all the national administrative procedures to go online all at once. Barriers are also removed from procedures of local governments as long as they are stipulated by law.

<Government Public Key Infrastructure (GPKI)>

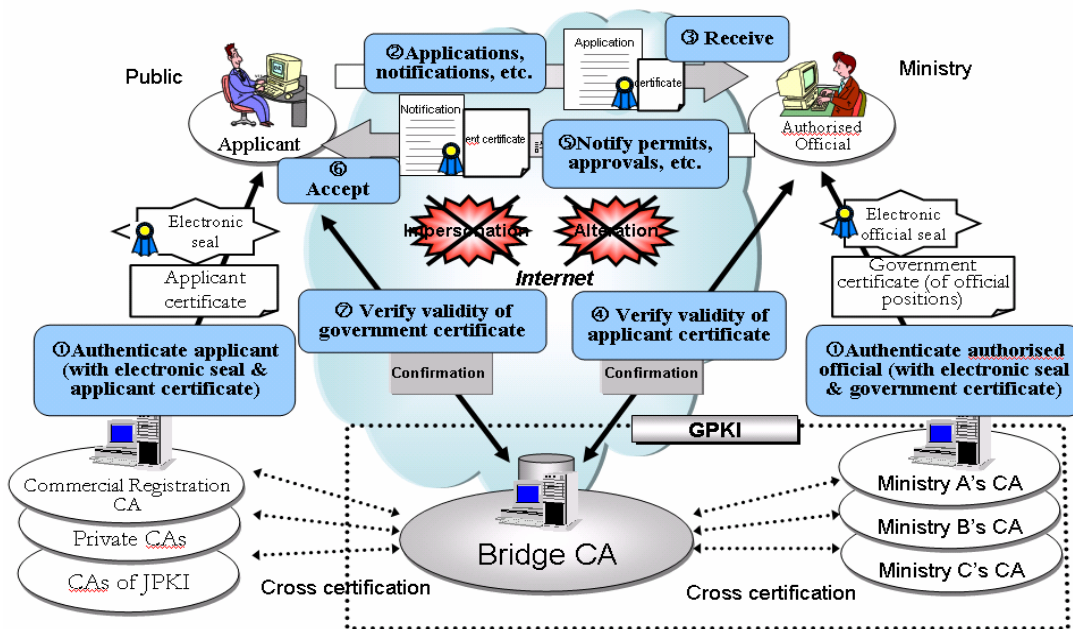
To make secure transactions possible, Government Public Key Infrastructure (GPKI)¹ has been in operation since April, 2001 in Japan as basic infrastructure for online applications between Ministries and the public. Also introduced were: Public Individual Certification Services to allow people to get

¹ Refer to <http://www.gpki.go.jp/> (Japanese Only)

digital certification at an affordable cost and Online Revenue Payment System to enable people to pay fees for procedures online.

Of these, the features and functions of GPKI are as follows:

Overview of Government Public Key Infrastructure



By adopting the authentication system with electronic signatures based on public key cryptosystem, GPKI makes it possible to confirm mutually whether electronic documents between administrative organs and the public via the Internet are truly made by the nominees and their contents are not falsified. GPKI is composed of two types of Certification Authorities (CAs): (1) Bridge CA operated by the Ministry of Internal Affairs and Communications, and (2) Ministry CAs operated by respective Ministries.

Ministry CAs issue electronic official seals of official positions and government certificate so as to certify neither non-authorized persons make notifications of dispositions nor the contents are falsified. There are 14 Ministry CAs as of November, 2005.

As for applicants' side, there are three types of CAs: (1) Commercial Registration CA, operated by the Ministry of Justice, based on the Commercial Register to attest the representatives of corporations, (2) private CAs, operated by the private companies under the Law concerning e-Signature and Certification Services², and (3) CAs of the Public Certification Services for Individuals (JPKI), operated by local governments to attest individuals based on Basic Resident Register. All these CAs issue the electronic certification of applicants. As of November, 2005, there are 16 CAs authorities joining mutual certification with the GPKI.

The key to GPKI for its smooth operation is the function of Bridge CA to mediate mutual certification between Ministry CAs and private CAs. The Bridge CA dissolves the complexity of exchanging certification individually between 16 Ministry CAs vis-à-vis 16 private CAs. It deals with all the information of valid official certificates and their invalidation; it also deals with unanimously validation of certificates issued by private CAs.

<Government Portal "e-Gov">

The portal site of the Japanese government "e-Gov" (<http://www.e-gov.go.jp>) has been in operation since April, 2001. The features of "e-Gov" are as follows:

"E-Gov" has a powerful website search engine to search all the government-related websites, counting up to about 1,500 in total. All the Ministries and their branch offices, National Universities, etc.

² Refer to <http://law.e-gov.go.jp/htmldata/H12/H12HO102.html> (Japanese Only)

have opened their own websites on the Internet. Wide range of information such as press releases, budgets, audits, white papers, statistics and public comment information is posted. Through “e-Gov” citizens and companies can easily find what they want all at once. The search engine updates information quite frequently, such as Ministry websites daily, for example. In FY 2004, the search counts rose to about 5 million.

Law Data Retrieval System (LDRS) is provided on “e-Gov”. Anyone can acquire the latest texts of laws in force, free of charge, by easy search such as using free keywords. This is the most frequently used function of “e-Gov”; the search counts increased by more than 20 per cent from 9.7 million in FY 2003 to 11.7 million in FY 2004.

The “e-Gov” provides also extensive links with administrative websites to allow users to make searches by information categories, e.g. public comment information. It also accepts opinions from the public about policy plans of Ministries. People can send in their opinions to a multiple numbers of Ministries and Agencies with a single click.

In this way, “e-Gov” provides people with access to cross-agency, government-wide stock of administrative information as well as a channel of communications.

(2) Renovating Business Processes and Systems.

Japanese government has promoted computerization since the age of mainframes, but traditionally initiatives were largely in the hands of respective Ministries or their Bureaux. What once was a most advanced computer system is now a legacy. Systems developed and introduced individually in Ministries even in such common operations as budget, personnel and payrolls. Hence scarce inter-operability; overall optimisation is a far cry. These are the issues facing Ministry CIOs when they met to decide upon a “Program for Building e-Government” at the CIO Council meeting in July 2003.

Based on this Program, the government started current initiatives of renovating business processes and systems comprehensively in response to ICT. By applying Enterprise Architecture (EA), business and systems are to be schematised in “Optimisation Plans” so that challenges and future goals will be clarified in the use of ICT. The goal of this initiative is to achieve a concise and highly budget-efficient public administration. CIOs decided to recruit outside ICT experts as Assistant CIOs, and a government-wide Council of Assistant CIOs formed. While a CIO is a decision maker; an Assistant CIO is a consultant.

A total of 79 areas (of which 23 are common, and 56 are individual, operations and systems) were selected as target of Optimisation. Responsible Ministries are nominated for each of them to formulate a Plan to eliminate duplication of operational processes, promote outsourcing etc. Plans are due no later than the end of FY 2005. An Assistant CIO works as a chief consultant to work out a draft Plan at a Ministry. Optimisation Plans have to go through the Council of Assistant CIOs at least twice, first as an early draft and then in a semi-final form, for technical scrutiny and advice from the viewpoint of cross-government solutions. Advice from the Council is more important for common operations and systems. Cross-checks from the viewpoint of overall Optimisation is thus firmly built in the process of Optimisation itself.

The estimated savings in time and costs by optimisation are presented in concrete figures in Optimisation Plans. Taking the example of Registration (both real estate and companies), it is anticipated optimisation will save around 11 billion yen per year compared to the cost of 2003. As for processing time, assuming that the ratio of online applications reaches 50% per year, a total saving of 2,113,000 hours is estimated. Regarding the personnel and payroll operations and systems, it is anticipated optimisation will save around 2 billion yen per year and total 13 million hours per year.

(3) Developing Infrastructure for e-Government

It is worth mentioning two aspects of infrastructure of e-Government. First, PCs and networks: mainframes needed to be replaced by PCs and networks. Second, as always, human factor: key organisation to push forward e-Government.

<PCs and networks>

At the national Government of Japan, “one PC per official” was realised approximately by 2002. At central offices of Ministries, there was more than one PC per official as of April 2002.

Government networks connecting these PCs came near to completion by then, too. Broadband networks of ministry LANs and government-wide WAN were set up. LANs were introduced in all the central offices of Ministries by 2002. Kasumigaseki WAN, connecting Ministry LANs, started its initial operation in January 1997. Through Kasumigaseki WAN, Ministries exchange and share information via e-mail, electronic official document exchange, bulletin board service and databases. Interconnection between national and local governments, i.e., between Kasumigaseki WAN and LGWAN (Local Government WAN), started in April 2002. Such services are in operations as e-mail and electronic official document exchange. Not only facilitating exchange of information between national and local governments, but Kasumigaseki WAN also extended its connection with Judiciary Information and Communications System since April 2004.

<Apparatus for pushing forward e-Government>

There are two essential key organs to promote e-Government.

One is Assistant CIO, or its collegial body as Assistant CIO Council. As mentioned above, an Assistant CIO works as a chief consultant to work out a draft Optimisation Plan at his or her Ministry. Function of Assistant CIO Council is more important from the viewpoint of overall optimisation as a whole government. The Council makes technical scrutiny and give advice to draft Optimisation Plans prepared by Ministries for cross-government solutions and budget efficient public administration. Cross check by the Assistant CIO Council is the key to the whole Optimisation Process.

The other is Administrative Management Bureau (AMB) of the Ministry of Internal Affairs and Communications. AMB initiates various policy programs relating to e-Government; it prepares guidelines for Optimisation Plans, works as Secretariat of both Council of CIOs and that of Assistant CIOs, and monitors actions and measures taken by Ministries. AMB is the key administrative engine to drive the whole initiatives of e-Government in Japan.

Key issues (Problems encountered at the implementation stage)

Though progress has seen that 96% of the national administrative procedures can go now online, its utilization rate remains low so far. Our priority shifted from putting government online to encourage and enhance actual use of online transaction by citizens and businesses. The same applies to Optimisation processes. What would be the benefit of a most optimised system if it is scarcely used? Therefore, both objectives of e-Government, i.e., (1) Providing better services to the Public, and (2) Renovating Business Processes and Systems, face the same next challenge: to encourage and enhance usage of various online services now available for individuals and companies.

Targeted groups

- (1) Providing better services to the Public: Not only administrative agencies but also citizens: By introducing the systems such as e-application, etc., these will bring reduction of work and to achieve budget-efficient administration to serve the public more with fewer resources.
- (2) Renovating Business Processes and Systems: Administrative agencies. However citizens will definitely have benefits from this effort eventually either in improvement in services or in savings of cost and time.
- (3) Developing Infrastructure for e-Government: Presumably administrative agencies. Emphasis shall be placed on the benefits of the public in this perspective, however. This is clearly understood in a “Single Window System for e-Applications” (see below), where an application from a citizen may be directly handled by an officer’s PC at his desk over network.

New efforts based on lessons learned

(1) Providing better services to the Public

The next challenge for e-Government is to enhance public relations activities to encourage citizens to get online and to establish broad partnership with the civil society. Here are the three major programs to tackle with the new challenge.

<Action Plans for Encouraging Online Services>

Ministries are bound to bring forth, by the end of FY2005, “Action Plans for Encouraging Online Services” for each of important and heavily used services (100,000 transactions or more per year). Concrete measures for developing user-oriented systems and improving services are to be pursued under

the time schedules and numerical targets of usage rates set by the plans. The government will venture in encouraging citizens and businesses to get online.

<Public Relations Activities concerning e-Government>

In order to realise a more viable e-Government, it is essential to enhance public relations activities for citizens and businesses, i.e. users of e-Government and to reflect users' views more on e-Government initiatives. The government extends its effort to build awareness and drive online usage in "e-Government Promotion Week", a week in October for intensive campaign of e-Government. Various surveys and events, both real and virtual, are held during the campaign to call on citizens and businesses to get online, through which citizens' voices are heard to feed back to "e-Government".

<E-Government Facilitators Program>

To strengthen PR and to take in citizens' perspectives, "e-Government Facilitators" are appointed from among the civil society. Approximately 250 facilitators are appointed throughout the nation from professional attorneys in the areas of law, tax, and social security and opinion leaders with strong ICT knowledge and active in community activities. These e-Government facilitators are the grassroots driving force for e-Government. They are the "multipliers" of e-Government, since most administrative procedures are handled by these professionals on behalf of citizens and companies. They are also the channels through which users' views are fed back to realise a more user-friendly and viable e-Government. Facilitators formed both regional and national Councils, but more importantly, they use the online bulletin board extensively to exchange views among them all across the country.

Besides, the "Single Window System for e-Applications" will be developed at "e-Gov" by the end of FY 2005. Currently, people have to open up different windows of different Ministries' websites, from one procedure to another, to make online applications. Under a new scheme, however, they will be able to apply for multiple numbers of e-applications all at once through the single window at "e-Gov". This will be a true "single window" for e-Government. Inquiry into online procedures will be handled by a newly set-up "e-Gov User Support Centre". The functions of "e-Gov" will thus be enhanced as a more useful, efficient and user-oriented government portal site in order to provide better services to the public.

(2) Renovating Business Processes and Systems

Optimisation process itself needs to be improved continuously through the cycle of PDCA (Plan – Do – Check – Act) in order to reflect the latest trends in technology. Exactly for this reason, guidelines are under development, due by the end of FY 2005, for implementing and evaluating Optimisation. Meanwhile Ministries' actions are monitored at the stage of budget requests to ensure the PDCA cycle should be in place.

In addition, GPKI will be restructured and its function optimized by the year 2008 in accordance with its Optimisation Plan of 2005. In optimizing GPKI, 14 Ministry CAs will be merged into one CA. These initiatives of "Optimisation" will contribute to make business processes more efficient and reduce the costs. The savings of ¥ 780 million per year is estimated.

Web link of the case study

http://www.soumu.go.jp/gyoukan/kanri/a_01_f.htm (The English version will be posted soon)