

# New e-Japan strategy and unified eID under discussion

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# New e-Japan strategy

- IT strategic headquarter formed in the cabinet issued next e-Japan strategy in January, 2006
- So far,
  - e-Japan strategy, 2001 → construction of broad band infrastructure
  - e-Japan strategy, 2003 → full use of IT infrastructure

ex. construction of e-Government

# Basic understanding

- Short term (up to 2007) target
  - Reduction of social cost through structural reform
  - Driving PDCA cycle → KPI should be defined properly
  - Service providers are classified into 3 categories
    1. Public sector in a narrow sense → e-Government
    2. Other public sector → Social security including health care and education areas, where both public and private service providers are working for the moment
    3. Private sector → e-Commerce
  - Reduction of administrative cost in all public sector

# Basic understanding

- Middle range (to 2010) target
  - Toward a matured and intelligent society
  - Realization of simple and transparent institution
  - Grand design for the total optimization of computer systems used in the central government → replacement of legacy by open system, unification, abolition
  - Exclusive release of the personal data to the person him/herself including health records
    - Requirement of eID

# e-Japan strategy, 2006

- Structural reform enforced by ICT as leverage
- Solution to the foreseeing social dilemma
- Focus on Healthcare and e-Government
  - Healthcare
    - Construction of National database for EBH, EBM and personal EHR
    - Supporting home medical treatment and consultant using ICT etc.
  - e-Government
    - Establishment of GPMO, PMOs to optimize the total e-Government
    - Establishment of IT governance etc.

# Construction steps of e-Gov.

- 1<sup>st</sup> step: Introduction of IT in the office
  - Computer system used for administrative work
- 2<sup>nd</sup> step: Secure network and PKI
  - KWAN and GPKI to exchange official documents
- 3<sup>rd</sup> step: Communication through internet
  - Online declaration and application
    - Tax declaration and auto mobile registration etc.

Stage proceeds from construction to steady operation

# Construction steps of e-Health

- 1<sup>st</sup> step: Introduction of IT in the hospital for example
  - Electric Medical Record and PC for bill in the hospital
- 2<sup>nd</sup> step: Secure network and PKI
  - Healthcare PKI; MHLW has just started
  - Secure network; N to N connection by the dynamic on demand VPN using secure chip; ISO 7816-13, N=200K
- 3<sup>rd</sup> step: Communication through internet
  - Electric Health Record for lifetime, Home medical care to see doctors through digital TV, etc.

**New e-Japan strategy focuses on the 2<sup>nd</sup> and 3<sup>rd</sup> steps**

# Promotion of IT in Healthcare

- Japan is very rapidly becoming so called an aging society
  - Increase of average life span and decrease of birthrate
    - ⇒ Decrease of the labor population rate
    - ⇒ Shortage of funds ⇒ Raising a social problem;  
dilemma
    - ⇒ Could IT solve this problem?
- Every Japanese citizen is supported by social insurance
- Medical costs is about 32 T yen (300 B US\$) and increase 1 T yen every year

# Promotion of IT in Healthcare

- Medical expense settlements give rise to more than 3 B paper transactions/year  $\Rightarrow$  IT could reduce the administration cost
- New goal  $\Rightarrow$  100% paperless by 2010 through EDI
- Introduction of EDI in healthcare field is also good for ecology
- Introduction of personal healthcare system (EHR) to enable retrospective examinations (personal benefits) and to establish a preventive medicine (public benefits)

# e-Government

- e-Government moving its stage from construction to steady operation
- More than 96% of applications and declarations become on-line by the end of March, 2006
- The ratio of on-line users is about 0.6%
- Problems to be solved
  - Digital signature is not yet well popularized → needs eID deployment
  - Some applications require additional paper documents such as receipt
    - Starting the review process

# e-Government

- Through system optimization using EA, e-Government operational cost will be reduced from 10 to 9 Billion US\$/year
  - Saving should go to New IT investment
- Establishment of GPMO in the cabinet office and PMO in every ministry → CIO, Assistant CIO, e-Gov assessment committee to evaluate, advice and order
- Promotion of on-line use of application and declaration
  - **More than 50% by 2010** → More than 60M IC cards
- Promotion of IC card with digital signature
  - **Requirement of eID**

# Discussion about eID

- 2 activities are taking in parallel at present
  - 2<sup>nd</sup> version of Resident Registration card
  - One unified social security card for national pension, health insurance, labor insurance, etc.
- Common function is eID
  - IC card with printed facial photo + digital signature
- Each application uses different ID number






# Discussion about eID

- Difference would depend on whether ID number of each application is recorded or not in IC card
  - Backyard system surely knows the ID number
  - Then, no need to store the ID number in IC card
  - Not only digital signature but also online authentication
  - Feasibility test should be done within this year
- Consequently, they should be merged into one card to reduce the issuance cost of eID
- Decision will be made by the end of September, 2006

## Additional information

- In the next e-Japan strategy, use of IC card at boarder control is clearly stated → Through a bilateral treaty, South Korea, Singapore, Thailand etc.
- Japan's immigration act requires stamps to record the date of embarkation and disembarkation
  - IC card does not have the space for stamps
- Ministry of justice will start to review the current act
- Then, eID will be IC card + two sets of PKI + e-pass LDS

# Time Schedule under plan

| Action               | 2006  | 2007   | 2008   | 2009         | 2010         |
|----------------------|---|--|--|--------------|--------------|
| Social security card | <br>Design             |  |  |              |              |
| 2 <sup>nd</sup> RRC  | <br>Design             |  |  |              |              |
| Unified card or eID  | <br>Feasibility test | <br>Preparation | <br>20M Issuance | 20M Issuance | 20M Issuance |

# Conclusion

- Ground work is taking progress in Japan
- For better social acceptance, eID needs to have biometric authentication such as intravenous pattern of finger or palm
- Full compatibility of all country's eIDs certainly gives rise to a lot of benefits to people