

# Advanced Research Center ASIST for Social Information Science and Technology

# Research for solutions of social issues by ICT

- Establishment of social infrastructure to ensure personal identity verification
- Development of the technology for medical information co-operation
- Utilization of health and medical information through life span
- Improvement of system procurement to support e-Government

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# Researches in ASIST

### **Social Information Infrastructure**

R & Ds on the technology of network personal identity verification, which realize safe and secure access to the personal information by the authorized user. It enables individuals to control their information managed by both central and local governments as well as medical institutions.

### e-Government System

R & Ds on the improvement of public procurement schemes of information systems used for e-Government. Anticipated outcome is the improvement of the accuracy and effectiveness of administration work with lower cost.

#### **Healthcare Services**

R & Ds on the medical information co-operation based on personal authentication using infrastructure of Individual Number system. A nationwide platform for medical information co-operation and online eligibility verification are under construction.



# ICT Policy Proposal & Recommendation

- Security of digital infrastructure for information co-operation in Individual Number system
- \* Design of multi-application IC card and Individual Number Card with PKI
- Effective IT governance on e-Governments for the national and local governments
- **★** BPR for e-Governments using BPMN
- DX by using electronic automobile inspection certificates
- Utilization of public personal identification service in the medical field (Online eligibility verification of national health insurance. Please see the figure below.)
- \* Introduction of electronic prescription for the better patient safety

Example of the realized Proposal

Online eligibility verification of national health

## Collaboration with Industry

- \* Next Generation IC Card System Study Group (NICSS)
- # Healthcare Information Secure Network Consortium (HEASNET)
- \* e-Government IT Investment Study Group

Etc.

Institution

Code



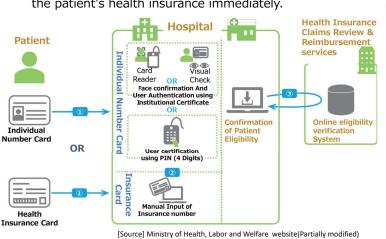
# **Development of Core Technology**

Institution

#### User Authentication using institutional certificate

- It is a technology that enables user authentication even when user has difficulty to use the PIN code of IC card (Patent No. 5300026).
- This scheme is actually installed in Individual Number Card and will be used by the online eligibility verification of national health insurance. Please see the figure on the lower left.

### insurance using Individual Number Card From March 2021, Individual Number Card will be available as a national health insurance card. In addition, medical institutions will be able to verify the eligibility of the patient's health insurance immediately.



https://www.mhlw.go.jp/content/10200000/000619590.pdf (Japanese)

SP SP Certificate Private Key Verification Institution Random Device Verification Service Start Institutio Code no. 1 n Institutio Randor no. 2 Code User SP Public Key Reading JPKI AP User Public Key Institution User Private Public Key Insert Individual Number Card