The Status of Korea PKI

Digital Signature Certification Team
KISA
2021. 6.
Agenda

1. Revision Background & Progress
2. Main Contents of Revised Electronic Signature Act
3. Future Prospect
Revision Background & Progress
Background of Revision

Since the Digital Signature Act was enacted in 1999 including the “NPKI”, National Informatization such as civil complaint, administration, finance and e-commerce, etc. were promoted to contribute to improving the quality of life of the people.

Meanwhile, due to the superior status of the “NPKI Certificate”, issue of monopoly occurred in the Digital Signature Market.

Through the abolition of the “NPKI” led by the government, competitive environment without discrimination was established between various electronic signature methods.

Convenient & various digital signature competition & innovation in the technology and services

Inconvenience of the users due to ActiveX is solved, and people are able to have more choices.
History of New Act

- Government announced a policy that is going to abolish the “NPKI Certificate” (‘18)
- MSIT and KISA made a new Electronic signature law (‘18)
- MSIT submitted the law to National Assembly (‘18)
- National Assembly passed The new ELECTRONIC SIGNATURE Act (‘20.5)
- The new ELECTRONIC SIGNATURE Act was promulgated (‘20.6)
- The new ELECTRONIC SIGNATURE Act is enforced (‘20.12.10)
Main Contents of the Revised Electronic Signature Act
Main Contents

Abolition of the “NPKI”, and Activation of the Use of Various Methods of Electronic Signature

- Equal legal force granted to all electronic signatures
- Based on the Act/Enforcement Decree when limiting the use to specific electronic signatures

Introduction of the evaluation & accreditation on operating standards in order to provide reliable and stable methods of electronic signature

- Evaluation of service providers’ compliance with the ‘operating standards of electronic signature certification work’.
- Provision of the information required to enable the user to select the most appropriate electronic signature rationally.

The provisions for the protection of the users

- Maintenance of the applicable provisions on user protection and liability for damages.
- In the event that mediation of disputes over the digital signature is required, requests for mediation may be submitted to the Dispute Resolution Committee.
Abolition of the “NPKI” & Activation of the Use of Various Electronic Signature

### Abolition of the ‘Certified Digital Signature’

<table>
<thead>
<tr>
<th>Past</th>
<th>Revised Act</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classification of the terms ‘Certified Digital Signature’ and ‘(General) Digital Signature’</td>
<td>Only ‘Electronic Signature’</td>
</tr>
</tbody>
</table>

### Equal legal force granted to all Digital Signatures

<table>
<thead>
<tr>
<th>Past</th>
<th>Revised Act</th>
</tr>
</thead>
<tbody>
<tr>
<td>Superior and differential legal force granted to the ‘Certified Digital Signature’</td>
<td>Legal force of all digital signatures is unified into one</td>
</tr>
</tbody>
</table>

### Requests for a specific digital signature method are prohibited without a legal basis

<table>
<thead>
<tr>
<th>Past</th>
<th>Revised Act</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mandatory use of the certificate is possible without a legal basis.</td>
<td>Indication on the Act and Enforcement Decree when requesting a specific digital signature.</td>
</tr>
</tbody>
</table>
Introduction of the Evaluation & Accreditation for Compliance with ‘the Operating Standards for Electronic Signature Certification Work’

Background to the Introduction of the Evaluation & Accreditation for Compliance with ‘the Operating Standards for Electronic Signature Certification Work’

Effects of the Electronic Signature

✓ According to the provisions in the Act
✓ The relevant electronic signature has the effects of a signature when selected as the signature method according to the agreement made between the interested parties.

Which electronic signature will be selected?

✓ A Reliable Electronic Signature Must be Provided when Selecting the Electronic Signature

Information on CA with a reliable electronic signature service is provided

✓ Information on CA with a reliable electronic signature service is provided
✓ Introduction of an accreditation to issue certificates by evaluating the compliance with operating standards
Procedure of the Evaluation & Accreditation for Compliance with the Operating Standards for Electronic Signature Certification Work

Role of Each Agency

Ministry of Science and ICT (MSIT)
- Selection/cancellation of ‘Evaluation agency’
- Designation of the ‘Accreditation Authority’
- Notification of ‘the Operating Standards for Electronic Signature Certification Work’

Accreditation Authority (KISA)
- Verification of the results of evaluation by the evaluation agency to determine the accreditation
- Issuance of the certificate and notification of issuance

Evaluation Agency
- Evaluation of CA compliance with the operating standards
- Request for evaluation by the evaluation agency to verify compliance with the operating standards

CA
- Evaluation Request
- Evaluation
- Submission of Evaluation Results
- Determination of Accreditation
- Issuance of Certificate
### Maintenance of User Protection Measures

#### Maintenance of the regulation on electronic signature authentication

**Past**
- Establishment and compliance with ‘Rules of Authorized Certification Work’ by Accredited CA

**Revised Act**
- Establishment and compliance with ‘the Regulation on electronic signature certification work’ by the CA complying with operational standards

✓ Regulation must be indicated with the service types, fees and scope of use, etc. for compliance

#### Maintenance of the regulation on liability for damages

**Past**
- Burden of proof and liability for damages imposed upon the Accredited CA

**Revised Act**
- Burden of proof and liability for damages imposed on the CA complying with operational standards.

✓ Instead of requiring compensation only when the user proves willful intent or negligence on the part of the CA, compensation will be required when the CA cannot prove that there has been no negligence on its part
3 Future Prospect
Future Prospect

A Fair Competition Market Environment Has Been Developed to Promote Competition & Innovation Among the Various Electronic Signature Technologies & Services

- Spread of various electronic signature technologies & services, such as biometric signature authentication, blockchain and DID, etc.
- Expansion of the user’s right of choice with regard to the electronic signature authentication service

Continuous improvement of policies and services to prevent inconveniences when using the electronic signature service, and expansion of the user’s right of choice

- Elimination of user inconvenience such as having to install Active X, etc.
- Provision of a simple and convenient electronic signature authentication service
Internet On, Security In!

Thank you

leeyes@kisa.or.kr