

The Status of Korea PKI

Digital Signature Certification Team

KISA

2021. 6.



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Agenda

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



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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)

2

Main Contents of the Revised Electronic Signature Act

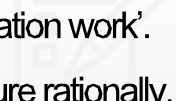


Main Contents


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

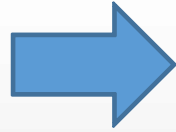
- ✓ Maintenance of the applicable provisions on user protection and liability for damages.
 - ✓ In the event that mediation of disputes over the digital signature is required, requests for mediation may be submitted to the Dispute Resolution Committee.
- 

Abolition of the "NPKI" & Activation of the Use of Various Electronic Signature

Abolition of the 'Certified Digital Signature'

Past

Classification of the terms
'Certified Digital Signature'
and '(General) Digital Signature'



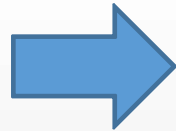
Revised Act

Only
'Electronic Signature'

Equal legal force granted to all Digital Signatures

Past

Superior and differential legal force
granted to the 'Certified Digital Signature'



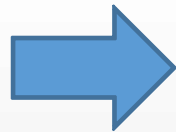
Revised Act

Legal force of all digital signatures
is unified into one

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

Past

Mandatory use of the certificate
is possible without a legal basis.



Revised Act

Indication on the Act and Enforcement Decree
when requesting a specific digital signature.

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'

④ Determination of Accreditation

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

⑤ Issuance of Certificate

③ Submission of Evaluation Results

Evaluation Agency

- ✓ Evaluation of CA compliance with the operating standards

① Evaluation Request

② Evaluation

CA

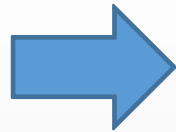
- ✓ Request for evaluation by the evaluation agency to verify compliance with the operating standards

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

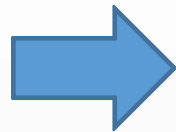
Establishment and compliance with
'the Regulation on electronic signature certification work'
by the CA complying with operational standards

- ✓ 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

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 Korea Internet &
Security Agency

