

# Identity & e-Signature (e-ID-AS)



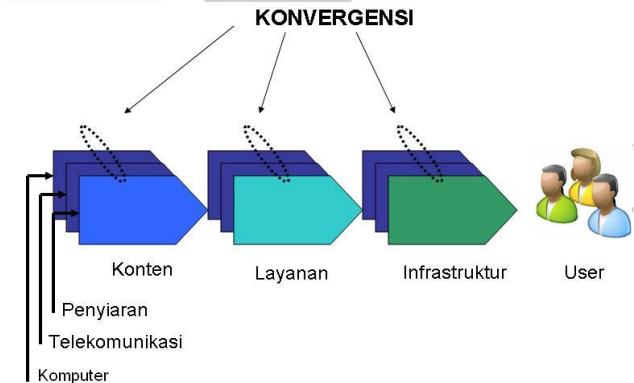
## DIVERSITY OF E-SIGNATURES



**Dr. Edmon Makarim., SKom., SH., LLM.**

# Dosen Hukum Telematika FH-UI

Disampaikan dalam Sosialisasi TTE, 1 Desember 2016.



# Landasan Hukum + Kekuatan Pembuktian => lihat [www.eclis.id](http://www.eclis.id)

<u>uu</u>	<b>28</b>	<u>2007</u>	<u>Tentang Perubahan Ketiga atas Undang-Undang Nomor 6 Tahun 1983 tentang Ketentuan Umum dan Tata Cara Perpajakan</u>	<u>1 Pasal</u>
<u>uu</u>	<b>11</b>	<u>2008</u>	<u>Tentang Informasi dan Transaksi Elektronik</u>	<u>7 Pasal</u>
<u>uu</u>	<b>3</b>	<u>2011</u>	<u>Tentang Transfer Dana</u>	<u>2 Pasal</u>
<u>pp</u>	<b>82</b>	<u>2012</u>	<u>Tentang Penyelenggaraan Sistem dan Transaksi Elektronik</u>	<u>16</u> <u>Pasal</u>
<u>ruu</u>	<b>.....</b>	<u>2015</u>	<u>Tentang Bea Meterai</u>	<u>1 Pasal</u>

**Apakah itu Tanda Tangan ?  
Apakah Fungsi Tanda Tangan ?**

- Representasi Simbolik
- Persetujuan

**Tanda Tangan Elektronik**

- Verikasi
- Autentikasi

- Tanda tangan tanpa sertifikat
- Tanda tangan dengan **Sertifikat**

- Terdaftar
- Tersertifikasi
- Berinduk

# What is Identity

OECD, digital identity management, 2012

## 1. A structural perspective:

Identity as a representation → Identity is seen as a set of attributes characterizing the person.

## 2. A process perspective:

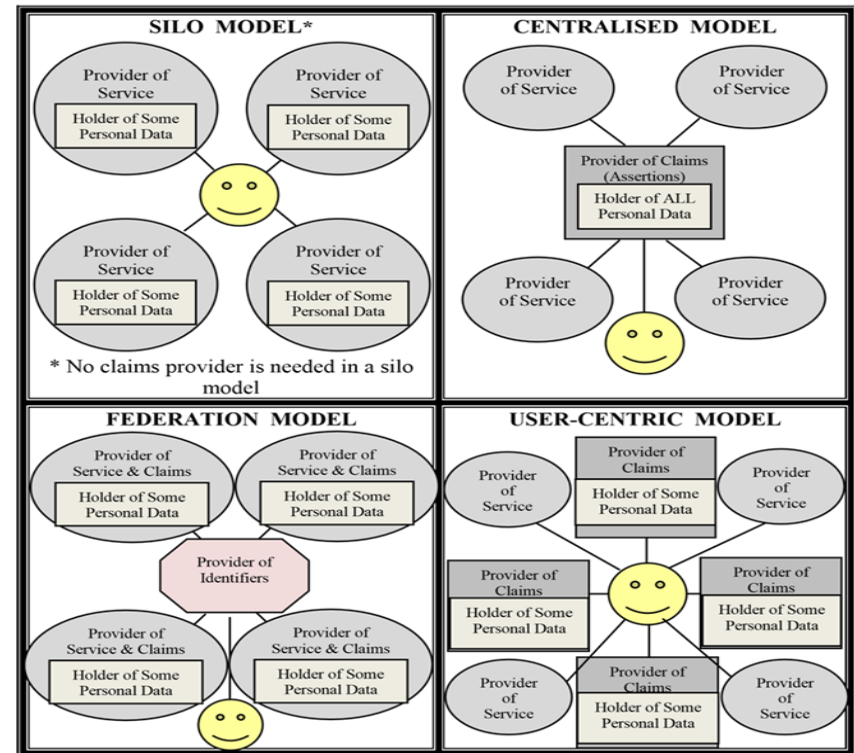
**Identity for identification.** Identity is considered according to a set of processes relating to disclosure of information about the person and usage of this information.

While there are many different approaches to identity management, it essentially involves two fundamental processes:

- (i) the process of collecting and verifying certain identity attributes about a person (or entity, device, or digital object) and issuing an identity credential to reflect those attributes (“**identification**”), and
- (ii) the process of later verifying that a particular person presenting that credential and claiming to be that previously identified person is, in fact, such person (“**authentication**”). Each of these basic processes can involve various sub-processes, depending on the nature of the data and context in which the two processes take place.

Once identity attributes about an individual are successfully authenticated, a third set of processes, referred to as “**authorization**,” is engaged in by the entity that intends to rely on the authenticated identity to determine what rights and privileges are accorded to such person (e.g., whether to enter into a contract with such person, or whether such person should be granted access to a database, an online bank account).

Figure 1. Individuals (data subjects 😊) and providers of services, claims, and identifiers: Who holds the personal data and What are the links between these parties?



Biometrics strategy relates to immediately available data



Picture

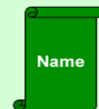


Finger Prints



Iris

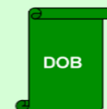
Identity Management relates to the processing of electronically available representations of data.



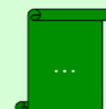
Name



Address



DOB



...

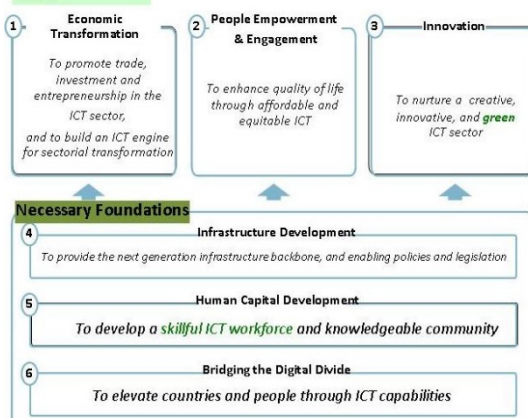
# ASEAN ICT Master Plan => 2015-2020

## ASEAN ICT Masterplan 2015

### Vision

Towards an Empowering and Transformational ICT:  
Creating an Inclusive, Vibrant and Integrated ASEAN

### Pillars



### Key Outcomes

- ICT as an engine of growth for ASEAN countries
- Recognition for ASEAN as the ICT centre of APAC
- Enhanced quality of life for people of ASEAN
- Tighter integration of ASEAN

### Annex 3. Availability of legislation or draft legislation in key areas of cyberlaws (continued)

UNCTAD member States	Electronic transactions		Consumer protection		Privacy and data protection		Cybercrime	
	Legislation	Draft	Legislation	Draft	Legislation	Draft	Legislation	Draft
<b>South-Eastern Asia</b>								
Brunei Darussalam	Yes*		Yes		No	No	Yes	
Cambodia	No	Yes	No	Yes	No	No	No	Yes
Indonesia	Yes		Yes		Yes		Yes	
Lao People's Democratic Republic	Yes		Yes		No	No	No	No
Malaysia	Yes*		Yes		Yes		Yes	
Myanmar	Yes		Yes		No	No	Yes	
Philippines	Yes*		Yes		Yes		Yes	
Singapore	Yes*		Yes		Yes		Yes	
Thailand	Yes		Yes		Yes		Yes	
Timor-Leste	no data	no data	no data	no data	no data	no data	no data	no data
Viet Nam	Yes*		Yes		Yes		Yes	

## VISION AIM 2020

### Digitally-enabled

Programmes for continual education and upgrading to equip ASEAN citizens with the latest infrastructure, technology, digital skill sets, information, applications and services.

### Secure.

A safe and trusted ICT environment in ASEAN, providing reassurance in the online environment by building trust in online transactions via a robust infrastructure.

### Sustainable

Responsible & environmentally friendly use of ICT.

### Transformative

A progressive environment for the disruptive use of technology for ASEAN's social and economic benefits.

### Innovative

A supportive entrepreneurial environment that encourages innovative and novel uses of ICT.

### Inclusive and Integrated

Empowered and connected citizens and stakeholders.

## OUTCOMES 2020

- Economic Development & Transformation**
- People Integration & Empowerment through ICT**
- Innovation**
- ICT Infrastructure Development**
- Human Capital Development**
- ICT in the Single Market**
- New Media & Content**
- Information Security & Assurance**

ASEAN will build a trusted digital ecosystem, so that transactions and information exchanges will be safe, secure, and trustworthy.



# Identity & e-transaction

Bahan Plastik PET-G



Gullicho Relief Background



Government

Health Care



Work



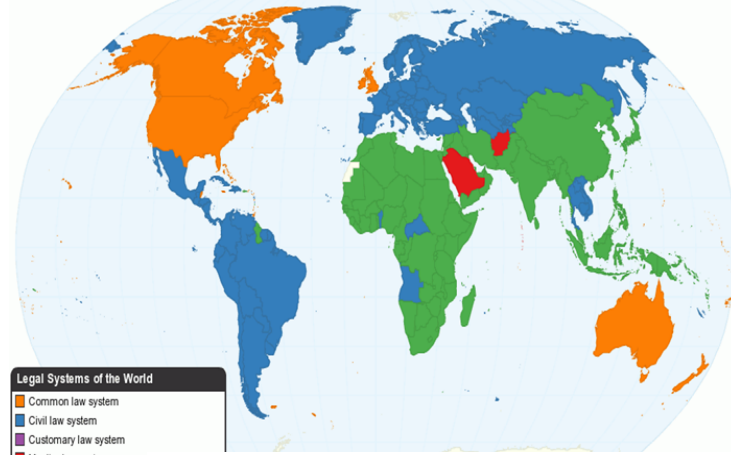
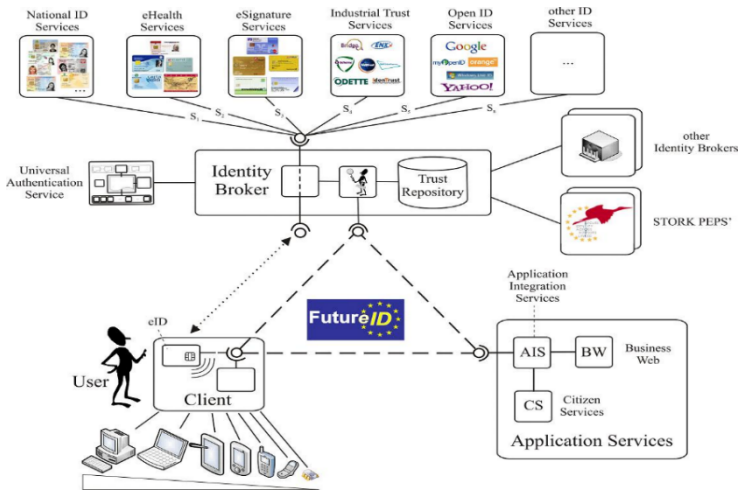
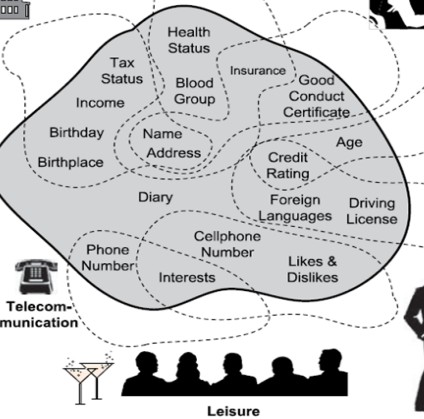
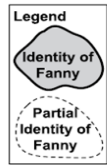
Shopping



Payment

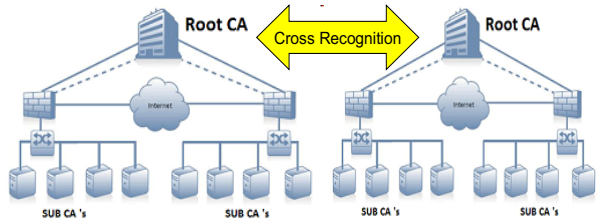


Travel



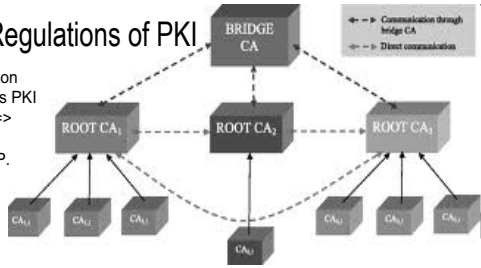
Legal Systems of the World

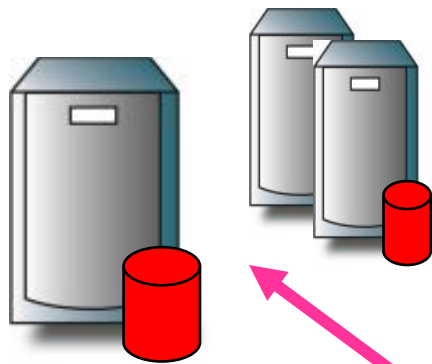
- Common law system
- Civil law system
- Customary law system
- Muslim law system
- Mixed law system



## Models Regulations of PKI

- Self-Regulation => communities PKI
- "Mesh" PKI => Peer-to-peer
- "bridge" CSP.





SIAM

## Instansi Terkait Hukum:

- Database Badan Hukum
- Database Daftar Perusahaan
- Database NPWP
- Database Kepailitan



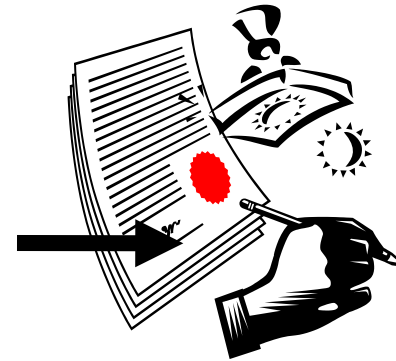
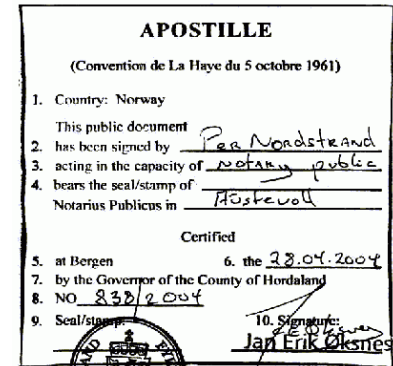
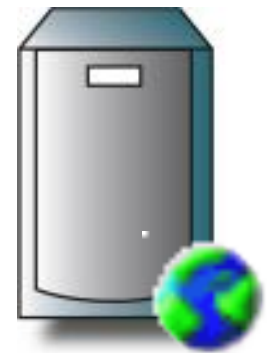
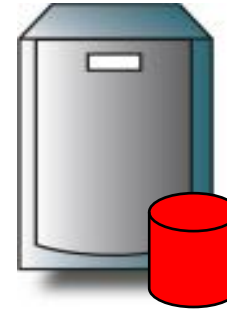
## NOTARIS



*Physically  
appearance:*

*verifikasi e-ID dengan  
persetujuan ybs*

## Public Repository Document



## Notaris:

- verifikasi ID
- Pembacaan
- Penandatanganan (Signing)
- Stempel (time stamping & seal)
- Pencatatan (registering on notary log record)
- Pelaporan (reporting & sending authentic e-copy)

# Legal Barriers (UNCITRAL)

- (a) **Law not written to address identity management:**
- (b) **Legal uncertainty/ambiguity:** laws focused on a specific technology.
- (c) **Privacy issues:**

This may involve addressing questions such as: (i) What information may be collected by the identity provider?; (ii) How much information may be disclosed to relying parties?; (iii) What control does the subject have regarding disclosure?; (iv) How securely must the data be handled by the parties?; and (v) What limits are imposed on use of the information by the identity provider and relying parties? These questions are often addressed by existing laws, which may also be supplemented by contract-based operating rules;

- (d) **Liability issues:**

- (e) **Jurisdictional variations and conflicts:** There are some key issues on which the application of existing laws and regulations to identity activities varies considerably across jurisdictions. This is often the case with respect to laws governing participant liability and data protection laws governing the privacy of personal information. Moreover, in some cases, regulation or licensing of identity system activities may pose additional barriers to the cross-border operation of identity systems. Thus, when identity systems operate across jurisdictional borders, the challenges of developing appropriate operating rules are compounded by the fact that existing laws and regulations vary (often significantly) between jurisdictions;

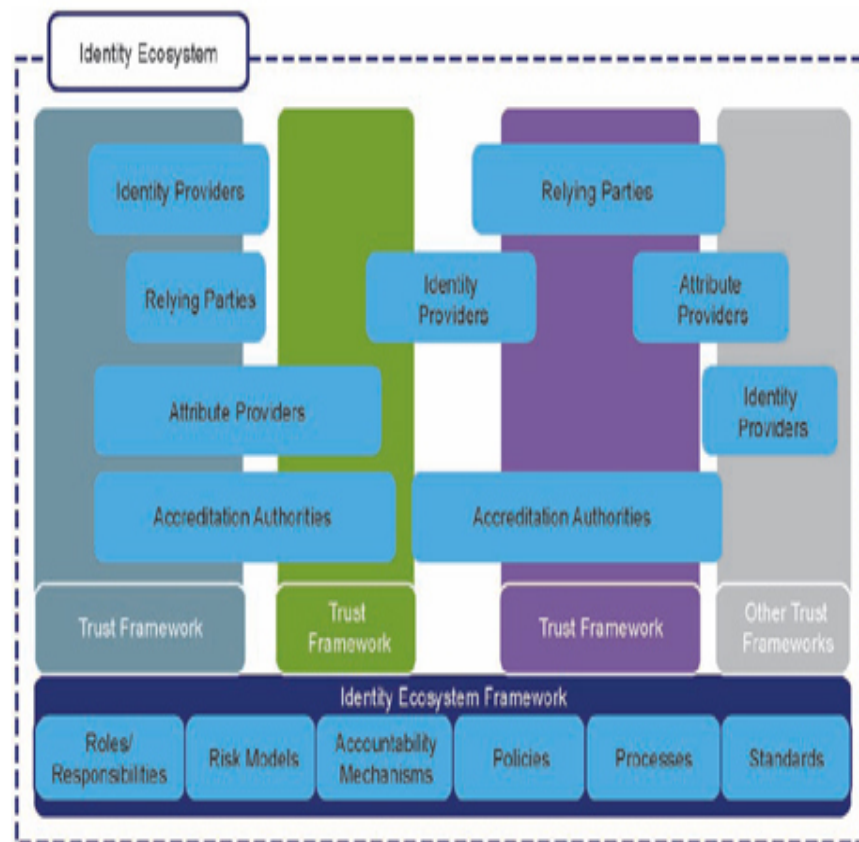
- (f) **Need for legal interoperability:** Identity systems are challenged by the fact that applicable laws may differ from jurisdiction to jurisdiction. In the absence of uniform laws governing their activities, identity systems often seek to address this problem by developing operating rules that provide legal interoperability to the overall system. The variation of laws and regulations among jurisdictions will challenge construction of such operating rules and other contracts that are needed to render system participant performance more uniform across online systems;

- (g) **Restrictions on ability to modify law by contract:** Some existing laws and regulations can be modified by contract. For example, many statutes incorporate doctrines of contract or commercial law that merely establish “default rules” which apply in the absence of express choice by the parties, but permit modification of those rules by agreement of the parties to a transaction. In such cases, parties to an identity system are free to modify default rules and fill-in the blanks by the use of appropriate contract-based operating rules. In other cases, however, mandatory rules of law cannot be disregarded by mere agreement of the parties, because they serve public policy purposes such as the protection of consumers or third parties



# Catt Komparative (1): US-NSTIC

- The realization of this vision is the user-centric “**Identity Ecosystem**” described in this Strategy. It is an online environment where individuals and organizations will be able to trust each other because they follow agreed upon standards to obtain and authenticate their digital identities—and the digital identities of devices
- The Identity Ecosystem is designed to securely support transactions that range from anonymous to fully-authenticated and from low- to high-value
- The Identity Ecosystem, as envisioned here, will increase the following:
  - **Privacy protections** for individuals, who will be able to trust that their personal data is handled fairly and transparently;
  - **Convenience** for individuals, who may choose to manage fewer passwords or accounts than they do today;
  - **Efficiency** for organizations, which will benefit from a reduction in paper-based and account management processes;
  - **Ease-of-use**, by automating identity solutions whenever possible and basing them on technology that is simple to operate;
  - **Security**, by making it more difficult for criminals to compromise online transactions;
  - **Confidence** that digital identities are adequately protected, thereby promoting the use of online services;
  - **Innovation**, by lowering the risk associated with sensitive services and by enabling service providers to develop or expand their online presence;
  - **Choice**, as service providers offer individuals different—yet interoperable—identity credentials and media



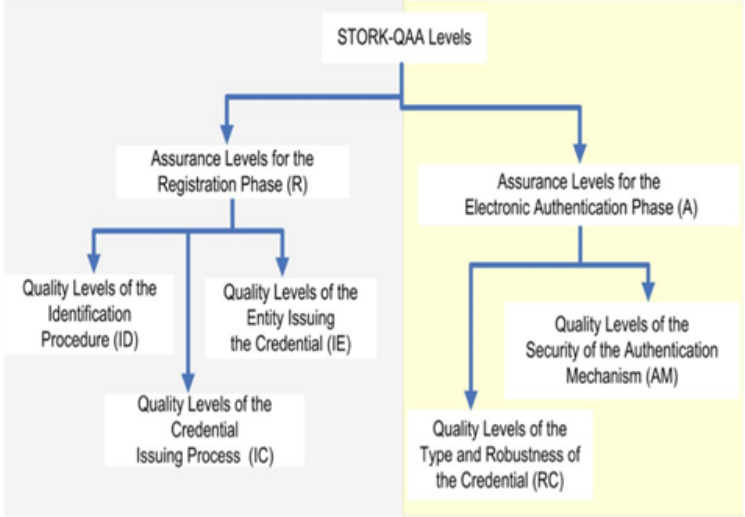
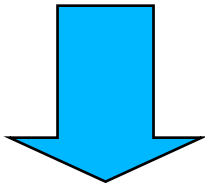
The Identity Ecosystem - Conceptual Model Image: NIST



# (2) EU Regulation 910/2014

STORK QAA level	Description
1	No or minimal assurance
2	Low assurance
3	Substantial assurance
4	High assurance

## E-Signatures



## eIDAS Regulation Part II

### eIDAS – Mutual recognition of eIDs

**Mandatory recognition of electronic identification**

Voluntary notification of eID schemes

"Cooperation and interoperability" mechanism

Assurance Levels: "high" and "substantial" (and "low")

Interoperability framework

Access to authentication capabilities: free of charge for public sector bodies & according to national rules for private sector relying parties

## eIDAS Regulation Part III

### eIDAS – Trust services

**Horizontal principles: Liability; Supervision; International aspects; Security requirements; data protection; Qualified services; Prior authorisation; trusted lists; EU trust mark**

Electronic signatures including validation and preservation services

Electronic seals, including validation and preservation services

Time stamping

Electronic registered delivery service

Website authentication

# Kesimpulan

1. Dalam rangka Trusted Identity in Cyberspace, Indonesia butuh kejelasan *National Authentication Framework* untuk menyikapi Open Identity/Federated Identity
2. Indonesia dan ASEAN dapat memadukan EU & US dalam mengembangkan regional identity ecosystem yang baik
3. Meskipun ASEAN countries banyak yg memilih untuk single credential system, namun tampaknya secara regional akan mengakomodir Federated Identity Management.
4. Jika ternyata dalam National ID Card tidak ada digital identity maka diperlukan online identity, ASEAN perlu mendorong Local Online Identity Provider untuk e-transaction => regional authentication framework.

**TANGGUNG JAWAB HUKUM  
PENYELENGGARA SISTEM ELEKTRONIK**

**EDMON MAKARIM, S.K.M., S.H., LL.M.**

DR. EDMON MAKARIM, S.K.M., S.H., LL.M., adalah seorang sarjana hukum yang telah menyelesaikan pendidikan sarjana hukum di Universitas Indonesia dan sarjana hukum di Universitas Padjadjaran. Setelah menyelesaikan pendidikan sarjana hukum, beliau melanjutkan pendidikan pascasarjana hukum di Universitas Indonesia dan Universitas Padjadjaran. Beliau juga pernah menjabat sebagai dosen hukum di Universitas Indonesia dan Universitas Padjadjaran. Beliau juga pernah menjabat sebagai Kepala Biro Hukum dan Pengkajian Kebijakan Hukum di Universitas Indonesia dan Universitas Padjadjaran. Beliau juga pernah menjabat sebagai Kepala Biro Hukum dan Pengkajian Kebijakan Hukum di Universitas Indonesia dan Universitas Padjadjaran.

**Tanggung Jawab Hukum Penyelenggara Sistem Elektronik**

**Revisi Edisi Kedua, Tahun 2016**

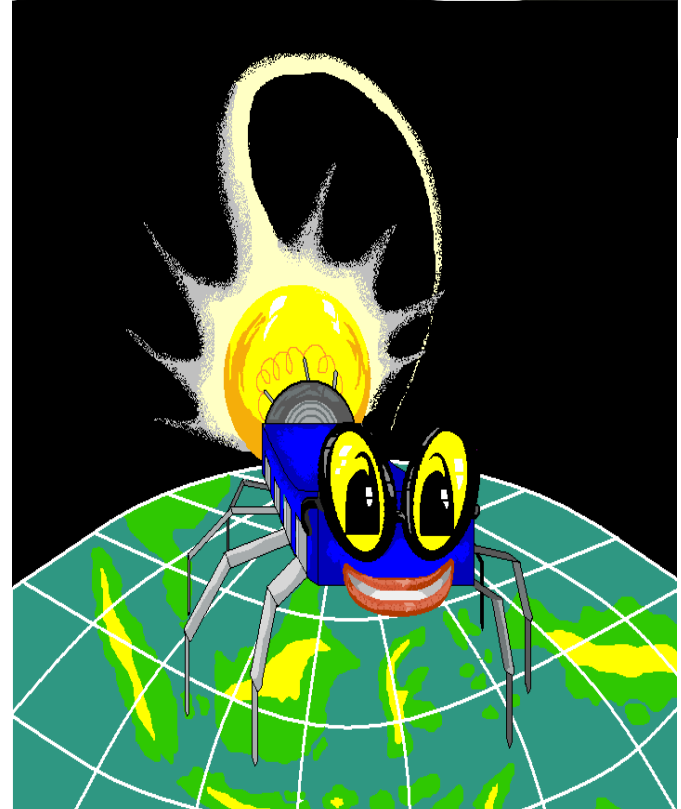
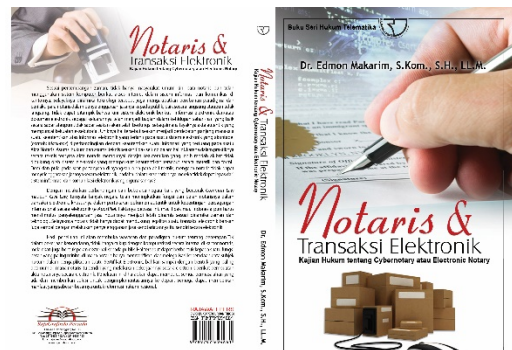
**TANGGUNG JAWAB HUKUM  
PENYELENGGARA  
SISTEM ELEKTRONIK**

Buku ini ditujukan sebagai kitab-kitab rujukan standar  
pemeriksaan hukum terhadap sistem elektronik (IT legal aid).

**Revisi Edisi Kedua, Tahun 2016**

**Dr. Edmon Makarim, S.K.M., S.H., LL.M.**

**Dr. Edmon Makarim, S.K.M., S.H., LL.M.**





# CV

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