

ISO 19626-1, **TCP4ED**

Trusted communication platform for electronic documents, Part 1 : Fundamentals

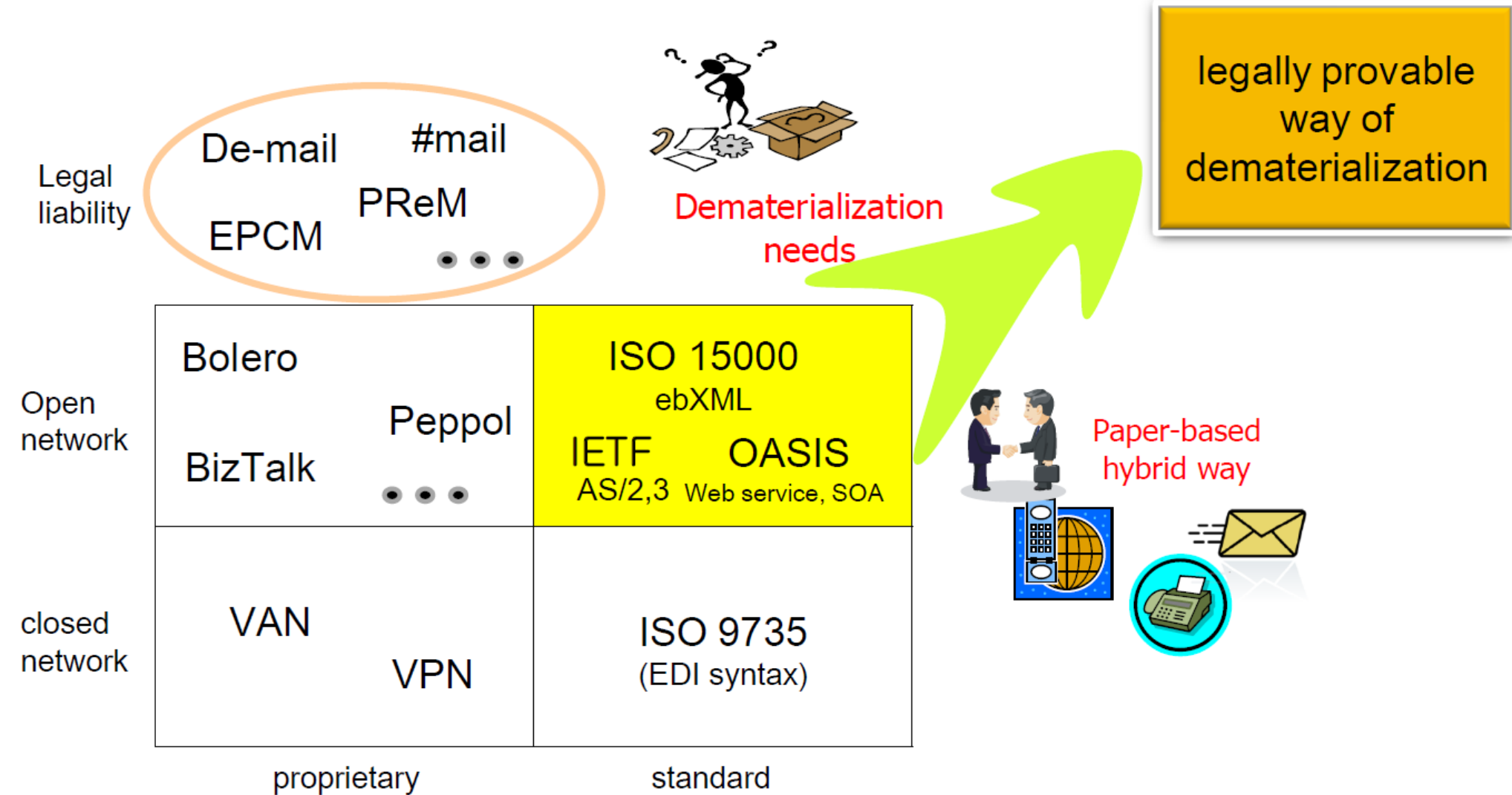
2017. 6. 12

Dr. Jasmine Jaegyong Chang

19626 Project leader, ISO/TC154/WG6 Convenor, ETSI liaison officer

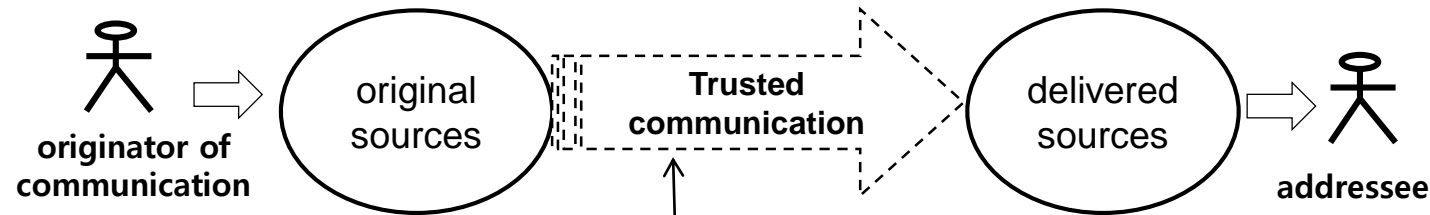
(jasmine@nipa.kr)

Background



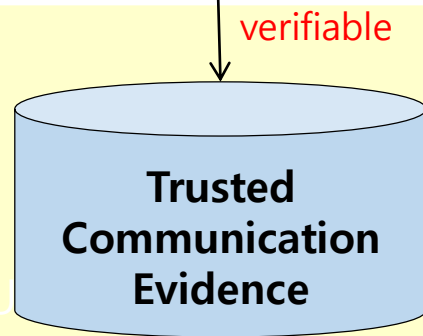
How to prove trusted communication, TCE (trusted communication evidence)

[UNECC] UNCITRAL 2012, United Nations Convention on the Use of Electronic Communications in International Contracts



[ISO 19626, TCP4ED]
Trusted Communication
Platform for Electronic
Documents

UNCITRAL 2012,
United Nations Convention on the U



Legal considerations

- 1. **Certainty** of communication
 - about **communication party**
 - about **time and place**
 - about **communication contents**
- 2. **Completeness** of communication delivery
- 3. **Confidentiality** of communication delivery

How to realize TCE,

Dematerialization mechanism

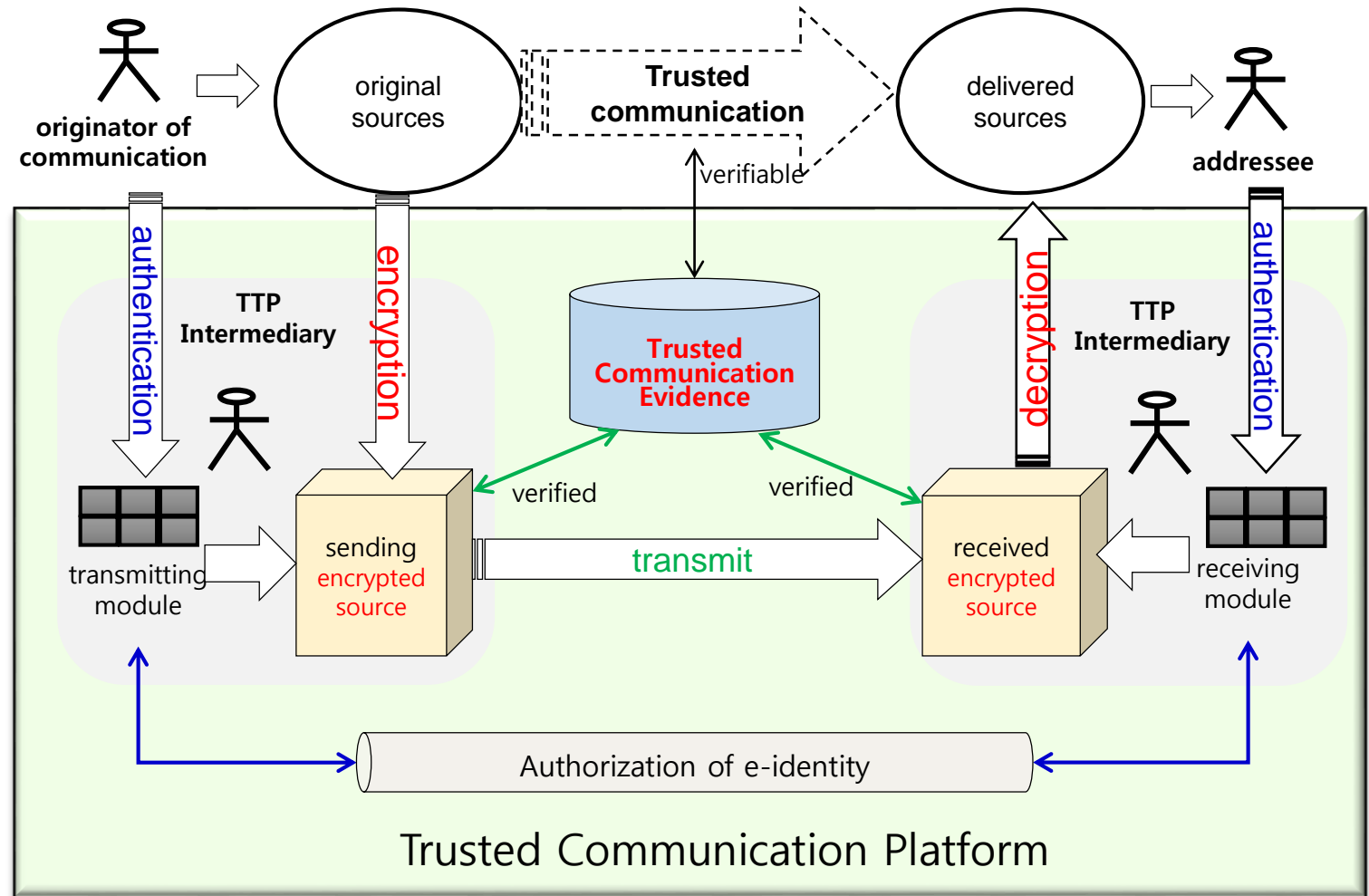
Dematerialization mechanism

Legal → Technology

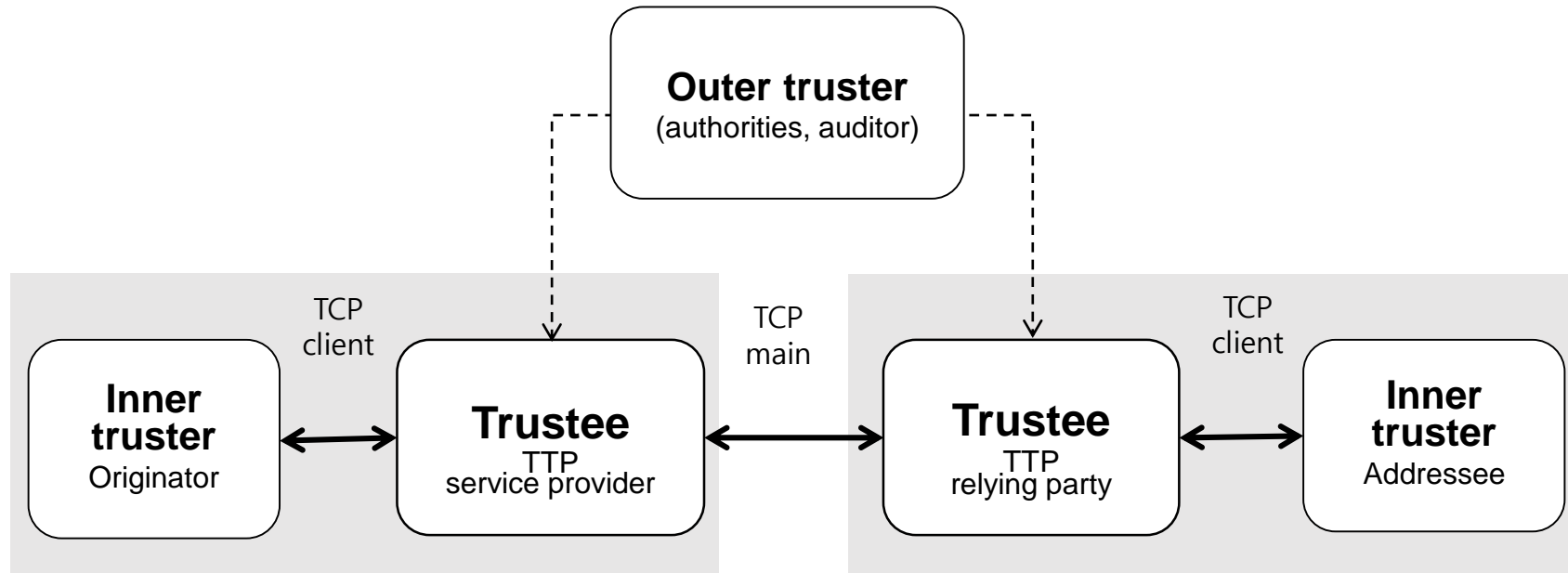
- Certainty → • Authentication
- Completeness → • Transmission
- Confidentiality → • Encryption

Trusted Communication Evidence

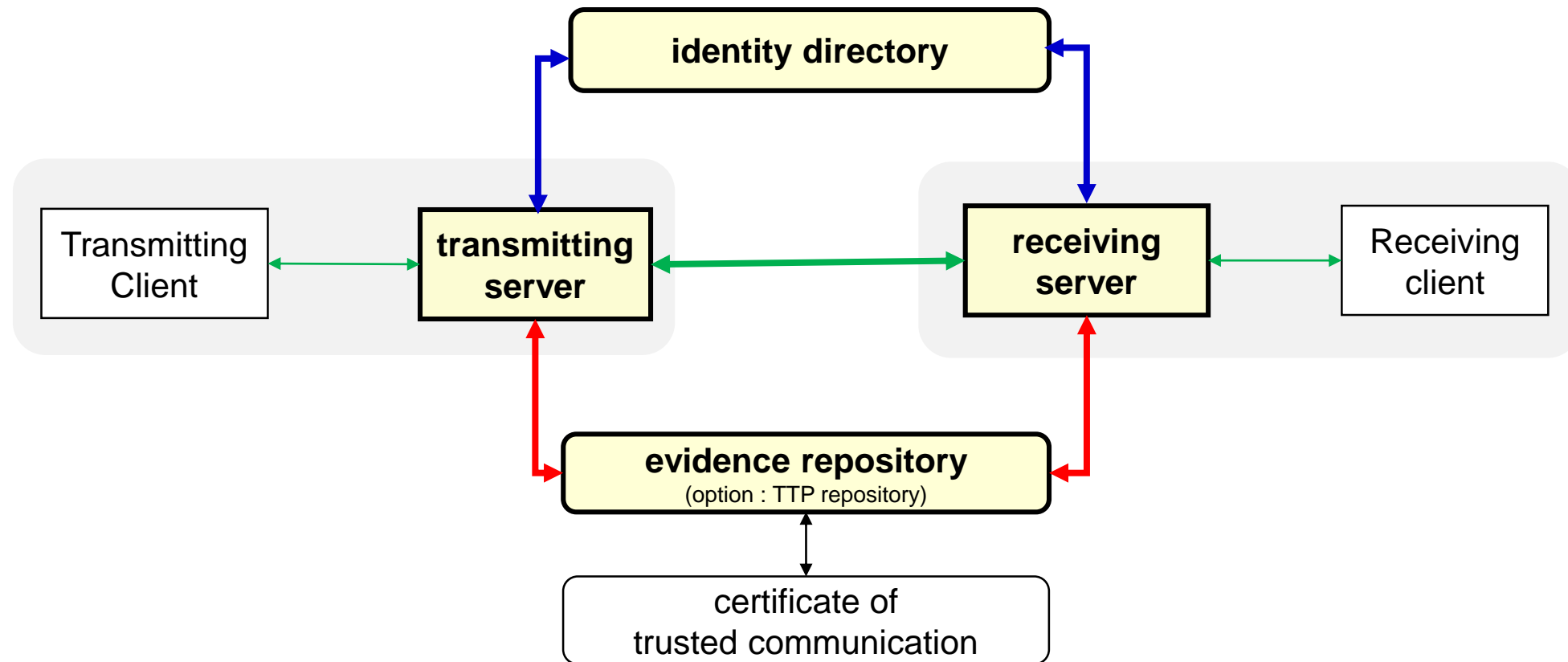
- Authorized e-identity
- Acknowledged of transmission
- Encrypted original sources



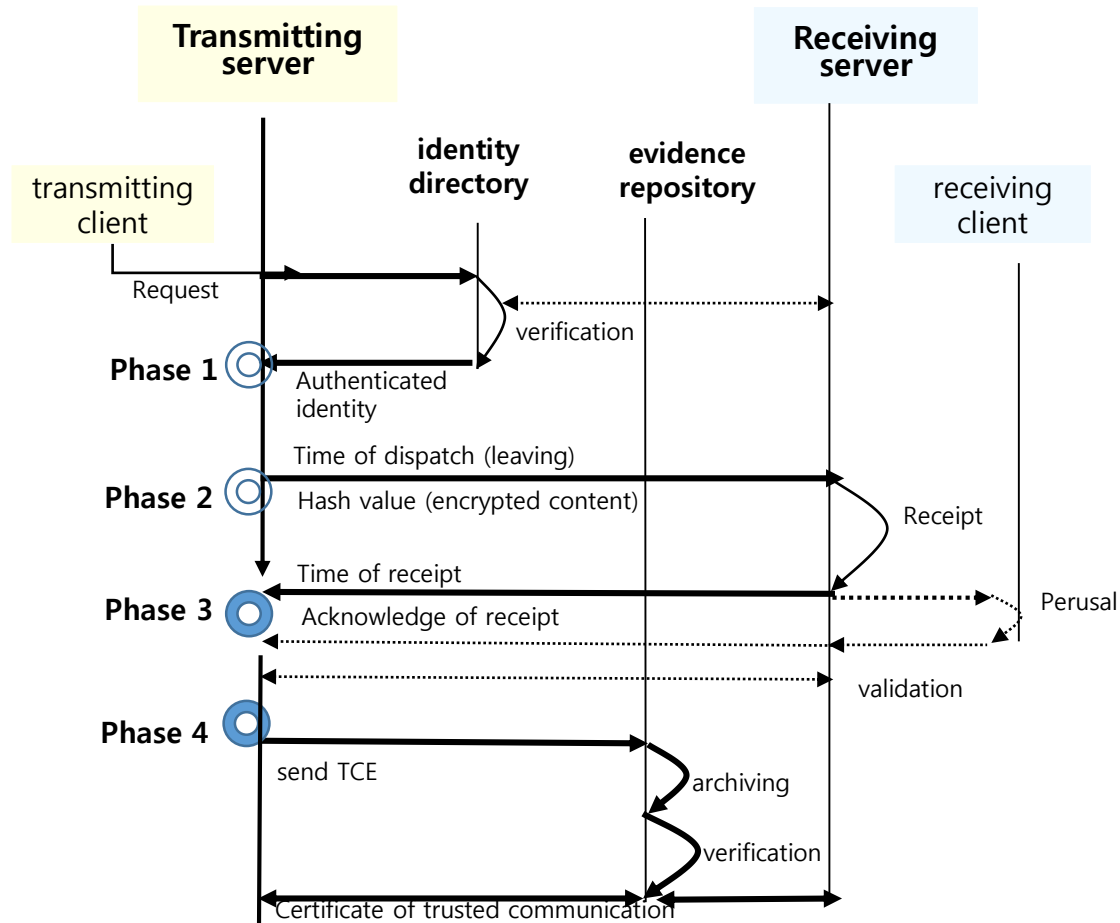
How to ensure trusted communication,
Trusted communication reference model



How to implement TCP, System architecture & requirements



How to create TCE, Capture & its sample



Capturing process

Certificate of trusted communication		
Communication	TCE Unique No	1234-5678-89-1234
	type	transmission/ receiving/ perusal
Originator of communication	ID(address)	gildong.hongl#nipa.pe.kr
	extension	organization : nipa, org ID : 123-45-45678
Addressee	ID(address)	yori.ko#kisa.or.kr
	extension	organization : kisa, org ID : 987-65-43210
Communication date/time	transmitting time	2015.03.10 09:13
	receiving time	2015.03.10 09:16
	perusal time	2015.03.10 10:05
Communication contents	content title	Hello
	Hash value (content)	nOczepEXEhtZGtpIXvRUiMnFutw
	attached file name	TCP overview.ppt
	Hash value (attached file)	MnvWxtuiPhtoQRvTuROMSoptwP
Issue date		2015.05.05
Issuer of certificate		A TTP evidence repository

A sample of TCE

TCP4ED Future Plans & Proposal

- 19626-1 Fundamentals CD ballot (June, 2017)
- 19626-2 Application and its Services NPWI (Oct, 2017)
- 19626-3 Interoperability "Propose cooperation "
- 19626-n ~ ~ " Fast track ETSI project"

(Thank you)