Economic and Social Commission for Western Asia

Mutual Recognition with EU Trust Services

Nick Pope Chair ETSI TC
Electronic Signatures and Trust Infrastructures

Workshop on Building Trust in Digital Government Services, Beirut, 11-12 September 2023
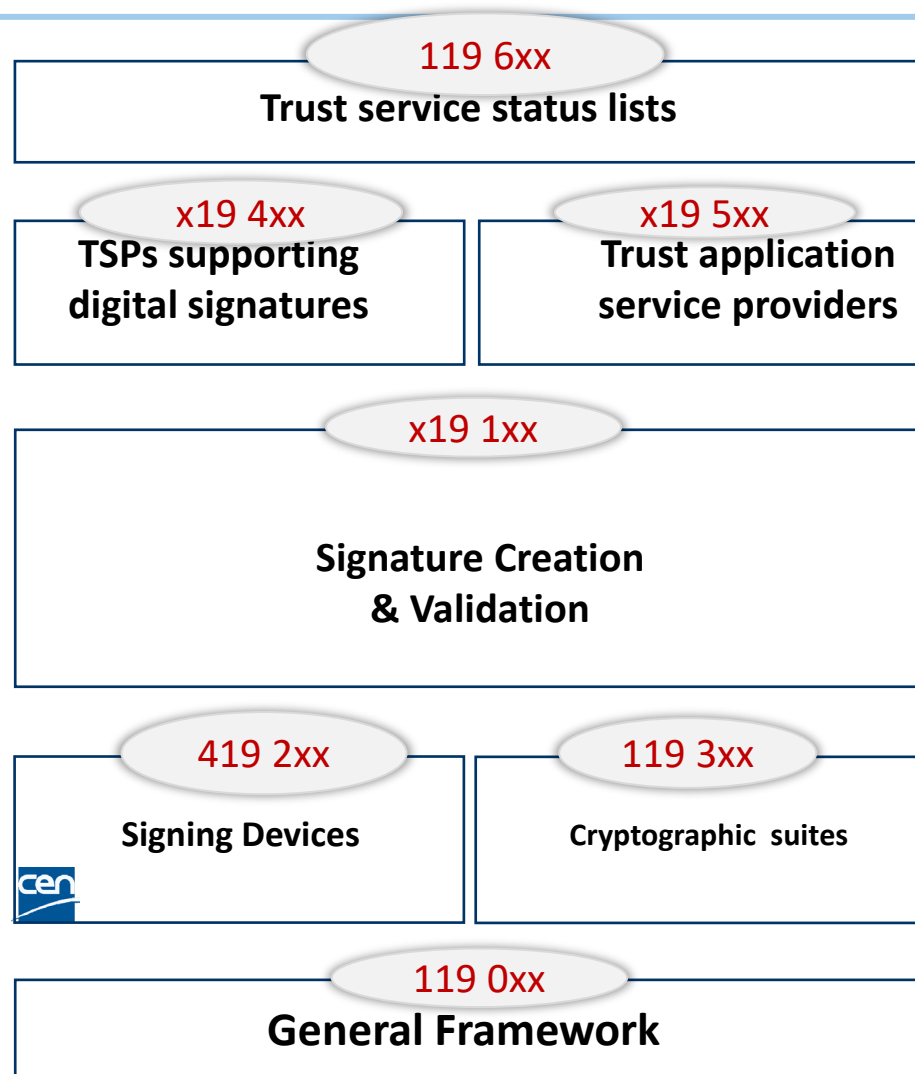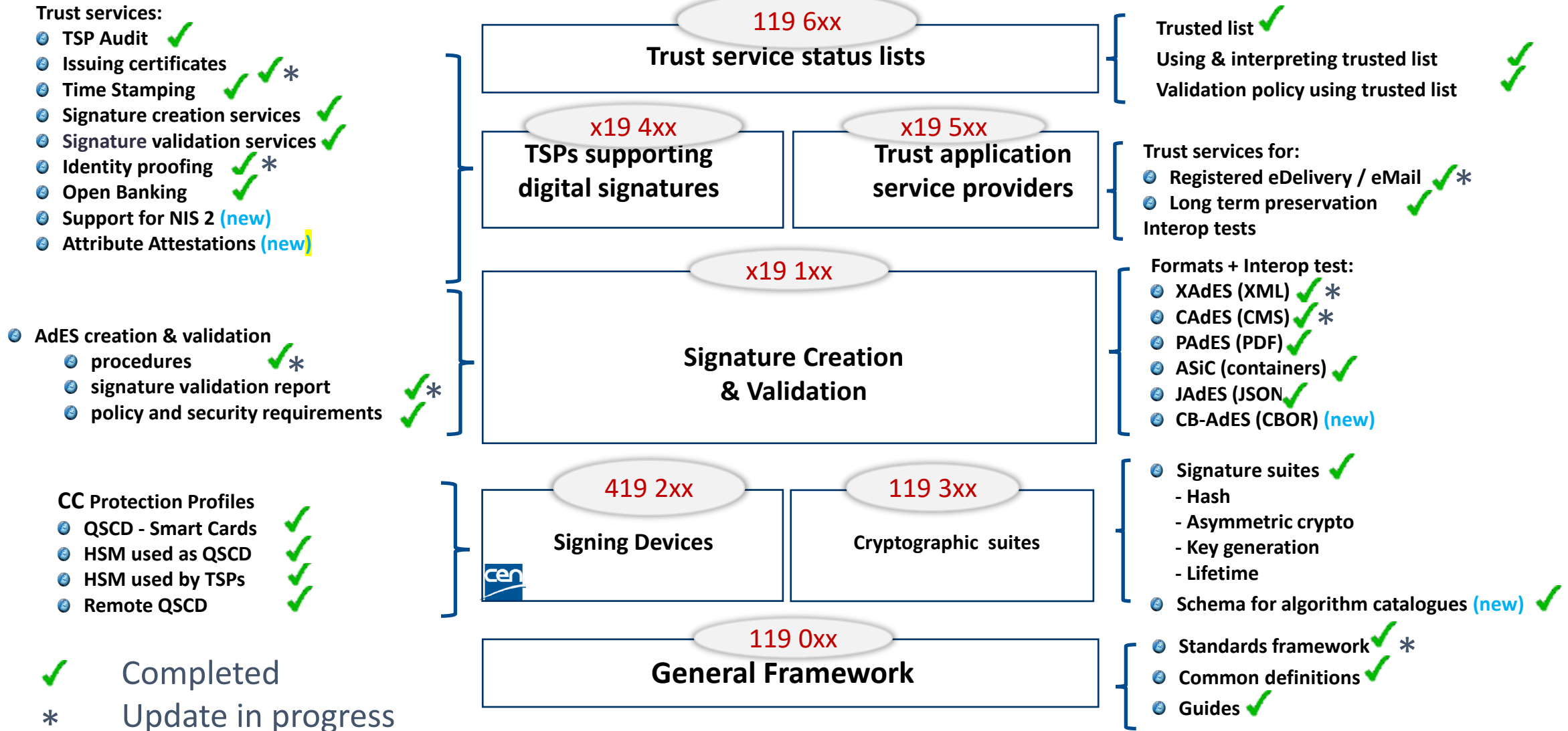
Agenda

- Standards for Electronic Signatures and Trust Infrastructures

- Areas of Mutual Trust

- EU Third Countries Trust List (TCTL) Programme

ETSI & CEN Standards for Electronic Signatures and Trust Infrastructures - Framework

119 6xx
Trust service status lists

x19 4xx
TSPs supporting digital signatures

x19 5xx
Trust application service providers

x19 1xx

Signature Creation & Validation

419 2xx
Signing Devices

119 3xx
Cryptographic suites

119 0xx
General Framework

ETSI & CEN Standards for Electronic Signatures and Trust Infrastructures - Details

Trust services:
- TSP Audit ✔
- Issuing certificates ✔ ✔ *
- Time Stamping ✔ ✔ *
- Signature creation services ✔
- Signature validation services ✔ ✔
- Identity proofing ✔ *
- Open Banking ✔ ✔
- Support for NIS 2 (new)
- Attribute Attestations (new)

- AdES creation & validation
  - procedures ✔ *
  - signature validation report ✔ *
  - policy and security requirements ✔ *

CC Protection Profiles
- QSCD - Smart Cards ✔
- HSM used as QSCD ✔
- HSM used by TSPs ✔
- Remote QSCD ✔

✔ Completed

* Update in progress

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119 6xx
Trust service status lists

- Trusted list ✔
- Using & interpreting trusted list ✔
- Validation policy using trusted list ✔

x19 4xx
TSPs supporting digital signatures

x19 5xx
Trust application service providers

Trust services for:
- Registered eDelivery / eMail ✔ *
- Long term preservation ✔
- Interop tests

x19 1xx
Signature Creation & Validation

Formats + Interop test:
- XAdES (XML) ✔ *
- CAdES (CMS) ✔ *
- PAdES (PDF) ✔
- ASiC (containers) ✔
- JAdES (JSON) ✔
- CB-AdES (CBOR) (new)

419 2xx
Signing Devices

119 3xx
Cryptographic suites

- Signature suites ✔
  - Hash
  - Asymmetric crypto
  - Key generation
  - Lifetime
- Schema for algorithm catalogues (new) ✔

119 0xx
General Framework

- Standards framework ✔ *
- Common definitions ✔
- Guides ✔

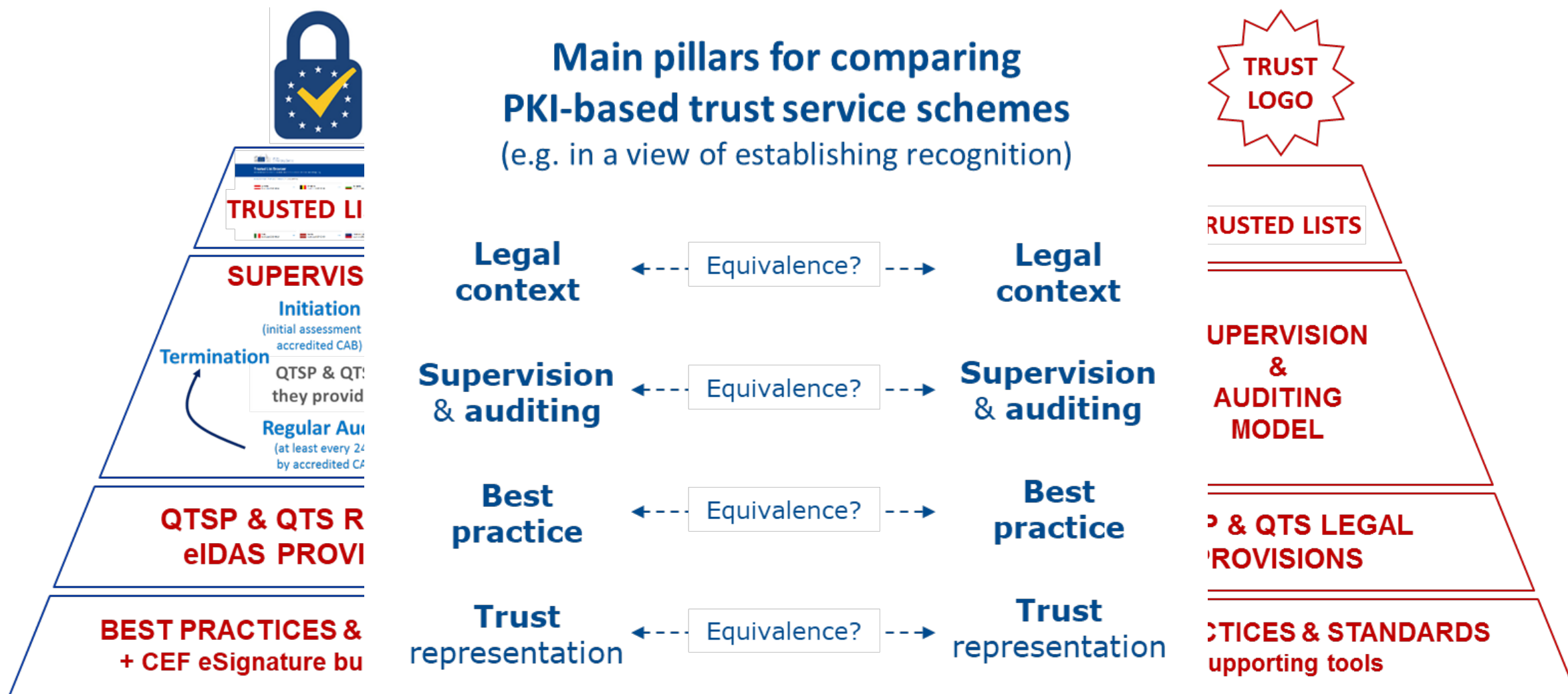See: https://portal.etsi.org/TBSiteMap/ESI/ESIActivities.aspx

Mutual recognition of electronic trust services

▽ Looking for harmonization, interoperability & mutual recognition of electronic trust services ...

▽ ... Four-pillar methodology reveals useful for comparing (PKI-based) trust services frameworks (see: ETSI TR 103 684)

  ▽ in a view establishing a benchmark

  ▽ in a view establishing a national / regional framework

  ▽ in a view of establishing recognition

Legal context	← Equivalent trust service requirements →	Legal context
Supervision & auditing	← Audit & supervision with equivalent oversight →	Supervision & auditing
Best practice	← Meeting common requirements for equivalent level of trust supporting interoperability →	Best practice
Trust representation	← Mappable to common Trust representation →	Trust representation
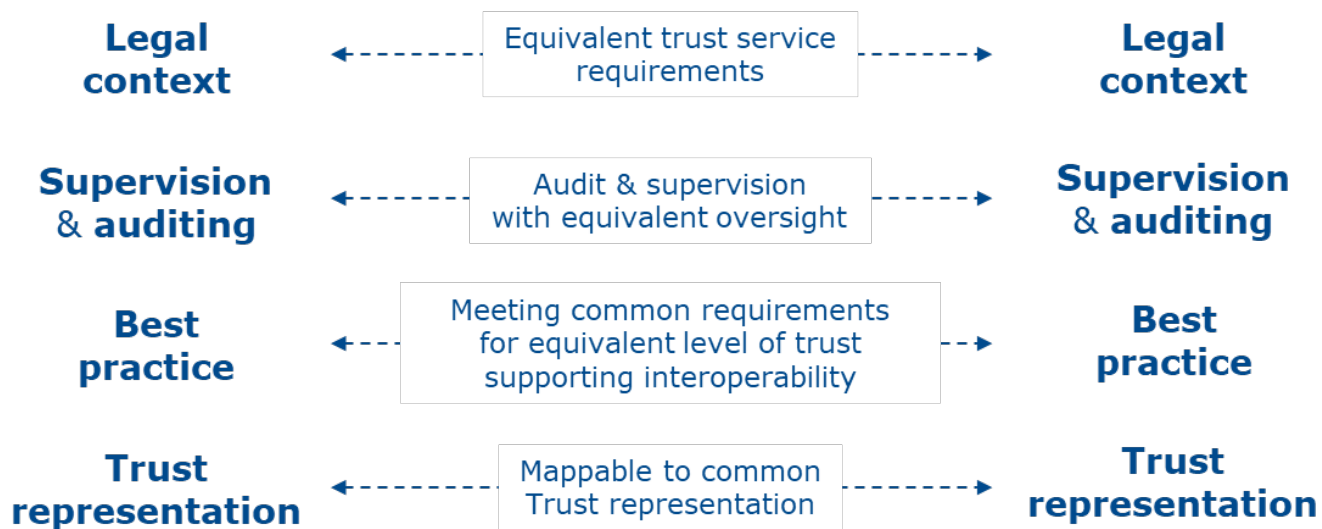
Mutual recognition of electronic trust services

Main pillars for comparing PKI-based trust service schemes
(e.g. in a view of establishing recognition)

TRUST LOGO

Legal context	Equivalence?	Legal context
Supervision & auditing	Equivalence?	Supervision & auditing
Best practice	Equivalence?	Best practice
Trust representation	Equivalence?	Trust representation

Left pyramid:
- TRUSTED LI[STS]
- SUPERVIS[ION]
  - Initiation (initial assessment... accredited CAB)
  - Termination
  - QTSP & QT[S]... they provid[e]
  - Regular Aud[it] (at least every 24... by accredited CA[B])
- QTSP & QTS R... eIDAS PROVI...
- BEST PRACTICES &... + CEF eSignature bu...

Right pyramid:
- [T]RUSTED LISTS
- [S]UPERVISION & [A]UDITING MODEL
- [QTS]P & QTS LEGAL [P]ROVISIONS
- [PRA]CTICES & STANDARDS [s]upporting tools

Mutual Recognition: Trusted List – what it is

ETSI TS 119 612 allows for Regional – Multi-country schemes

- List of the Lists (LOTL)
- Facilitating discovery, authentication and grouping of trusted lists pertaining to a common ecosystem / approval scheme

e.g. European LOTL whose authenticity and integrity can be verified via a publication in the Official Journal of the EU and the concept of pivot-LOTL
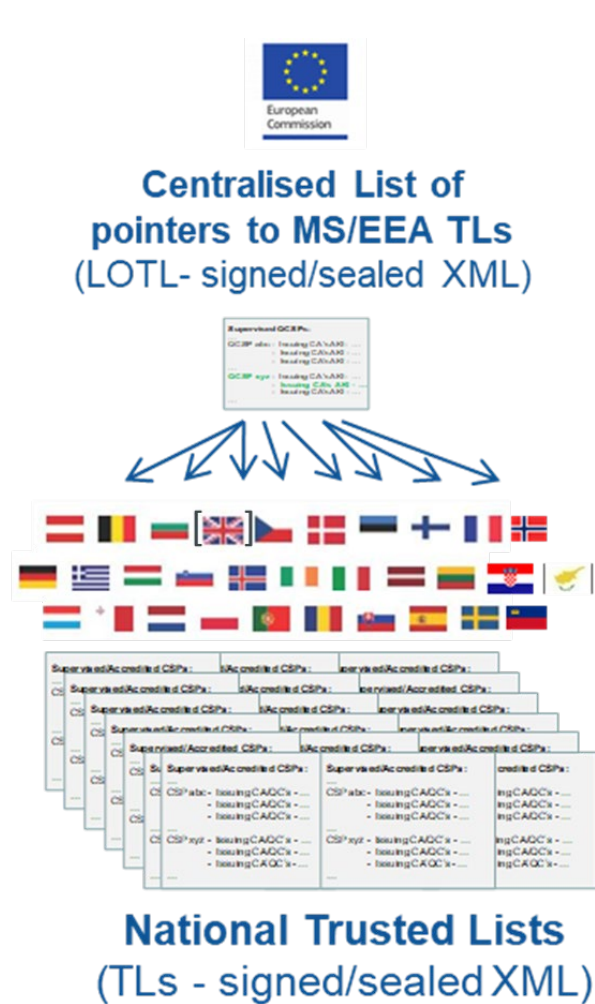

Centralised List of pointers to MS/EEA TLs
(LOTL- signed/sealed XML)
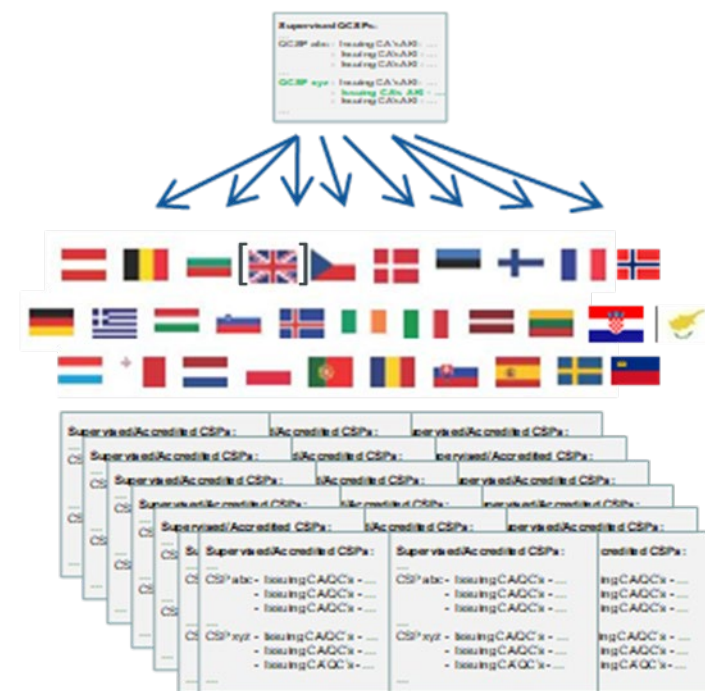
National Trusted Lists
(TLs - signed/sealed XML)

EU Third Countries Trust List

Requires Mutual Recognition Agreement

EU Third Countries Trust List – Further information

Documentation:

https://eidas.ec.europa.eu/efda/international/trust-service?section=download_center

Third Country AdES (Digital Signature) List of Trusted List

https://eidas.ec.europa.eu/efda/tl-browser/#/screen/tc-tl

ETSI Further information

Information on Signatures and Trust Services standards :
  https://portal.etsi.org/TBSiteMap/ESI/ESIActivities.aspx

ETSI standards: available for free download: http://www.etsi.org/standards-search

News list on Signatures and trust services:
  https://list.etsi.org/scripts/wa.exe?SUBED1=e-signatures_news&A=1

EU Pilot for the International Compatibility of Trust Services
  https://esignature.ec.europa.eu/efda/intl-pilot/

Any questions or comments you can contact me on:

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