

Europäische und globale Vertrauensräume durch eIDAS

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For: **OMNISECURE Berlin**

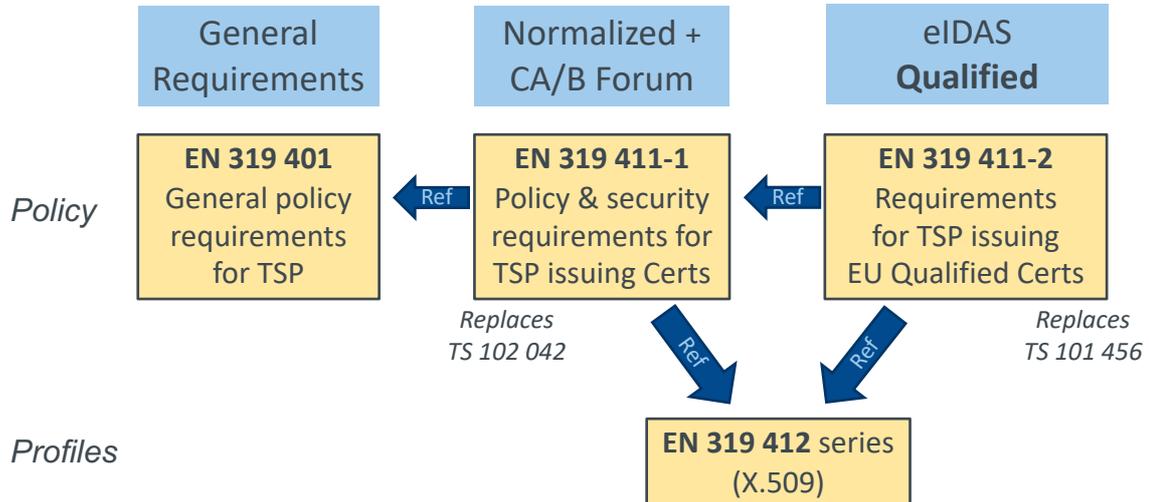
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Agenda

- Background eIDAS
- Study Methodology
- Report recommendations
- Global Initiatives

ETSI standards overview: Trust services issuing certificates



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Background

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ETSI standards overview: TSP audit requirements

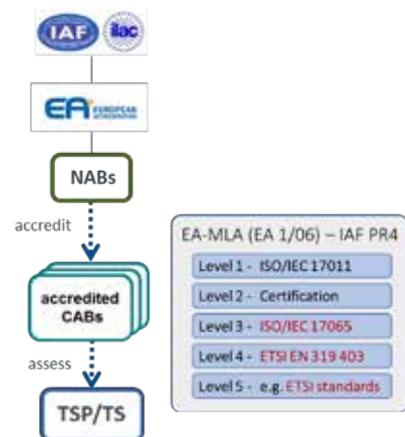


➤ EN 319 403 on requirements for bodies auditing TSPs

- Primary reference: **ISO/IEC 17065** specifying general requirements for conformity assessment bodies (CABs) performing certification of products, processes, or services
- Supplements ISO/IEC 17065 to provide additional dedicated requirements for CABs performing certification of TSPs
- Incorporates additional requirements on CABs relating to the audit of a TSP's management system, as defined in **ISO/IEC 17021** and in **ISO/IEC 27006**

➤ New supplements on additional requirements for CABs auditing

- Part 2: TSPs issuing PTC (e.g. as in CA/Browser Forum)
- Part 3: QTSPs against eIDAS Regulation



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Background

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ETSI standards overview: Trusted Lists

- eIDAS Regulation requires EU MS to maintain national trusted list having constitutive value on who is QTSP for what type of QTS
 - Legal certainty
 - With full history on qualified status
- CID (EU) 2015/1505
 - Procedures and formats for EU MS TL (signed XML)
 - Building upon ETSI TS 119 612 v2.1.1
 - Specifies also TLs for 3rd countries or international organisations
- EC compiled list of pointers to EU MS TLs allowing for their location and authentication



EC CEF eSignature Service Offering (also available to 3rd countries)

Tools & software



Trusted List Browser

Tool to browse the European trusted lists. One can search by type of trust service and country, by name of the trust service or search a trust service that issued the signing certificate contained in a file



DSS open-source library

Open-source software library for creation and validation of electronic signature and seals. Out-of-the-box compliance with eIDAS Regulation and ETSI standards.



TL-Manager

Tool that enables the management of Member States' Trusted Lists.



eSig validation tests

Tool to test an eSignature implementation (software providers, TSP, conformity assessment bodies, supervisory bodies, ...). "Fake" LOTLs, TLs, certificates and signed documents are generated automatically, and refreshed on a regular basis.



Monitoring the quality of Trusted Lists:

Service meant to facilitate the improvement of the Trusted Lists through webinars, trainings, development of internal KPIs, etc.

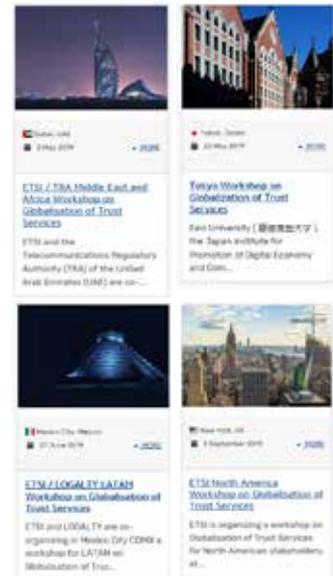


Notification tool NEW

Tool that will help improve the notification system about trust services received from Member States. The information will be structured, centralised via an easy-accessible location and in a user-friendly way.

STF 560 Study on Global Trust Service Schemes

- Investigate existing PKI-based trust service schemes and their trust model around the world
 - [Questionnaire](#) & Desktop research
 - Regional Workshops in [Dubai](#), [Tokyo](#), [Mexico](#) & [New York](#)
- Aims to facilitate cross recognition between EU eIDAS trust services, and other non-EU schemes.
- Identify technical basis for mutual recognition
 - Incl. model, barriers, solutions
- Methodology on 4 pillars:
 - legal context, supervision/audit, best practice, trust representation



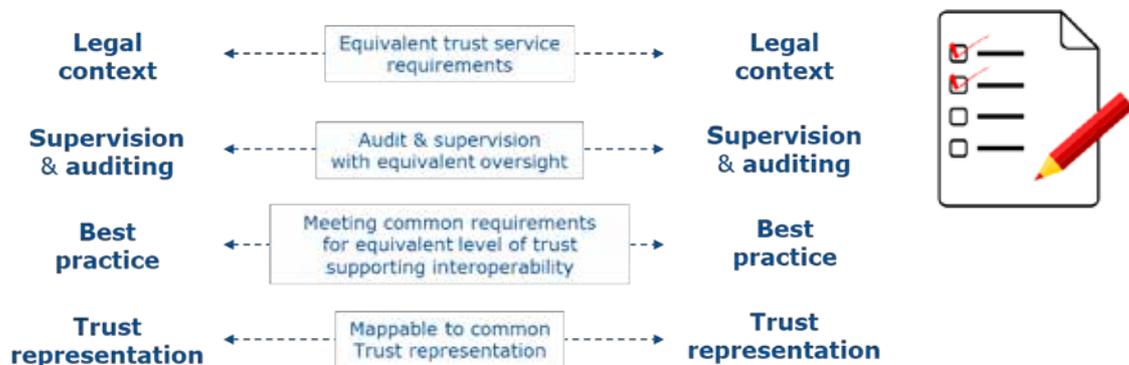
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Study aims

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Methodology

Main points for comparison between PKI-based trust service schemes (for each of the four pillars)

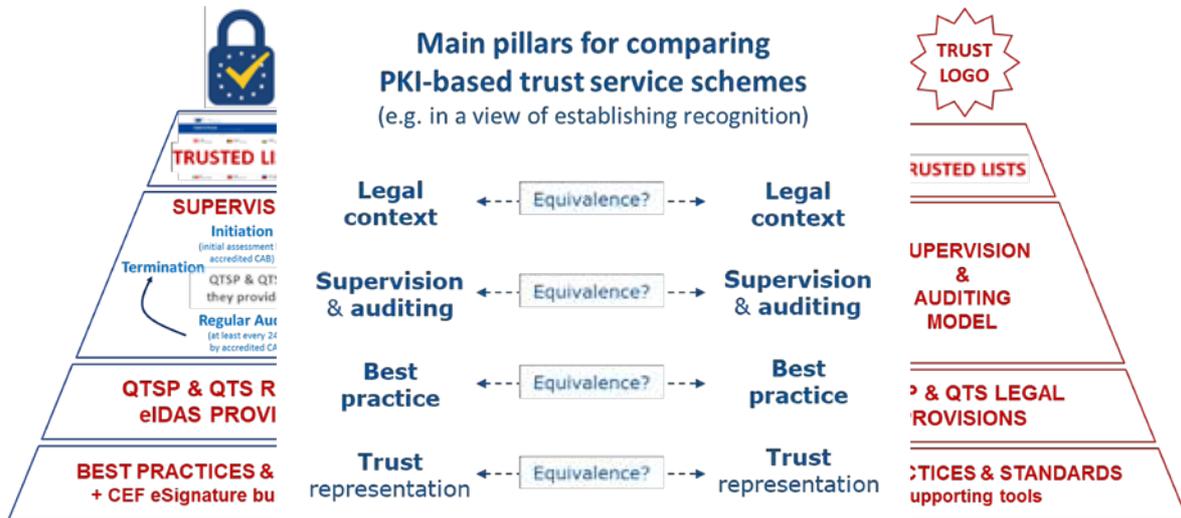


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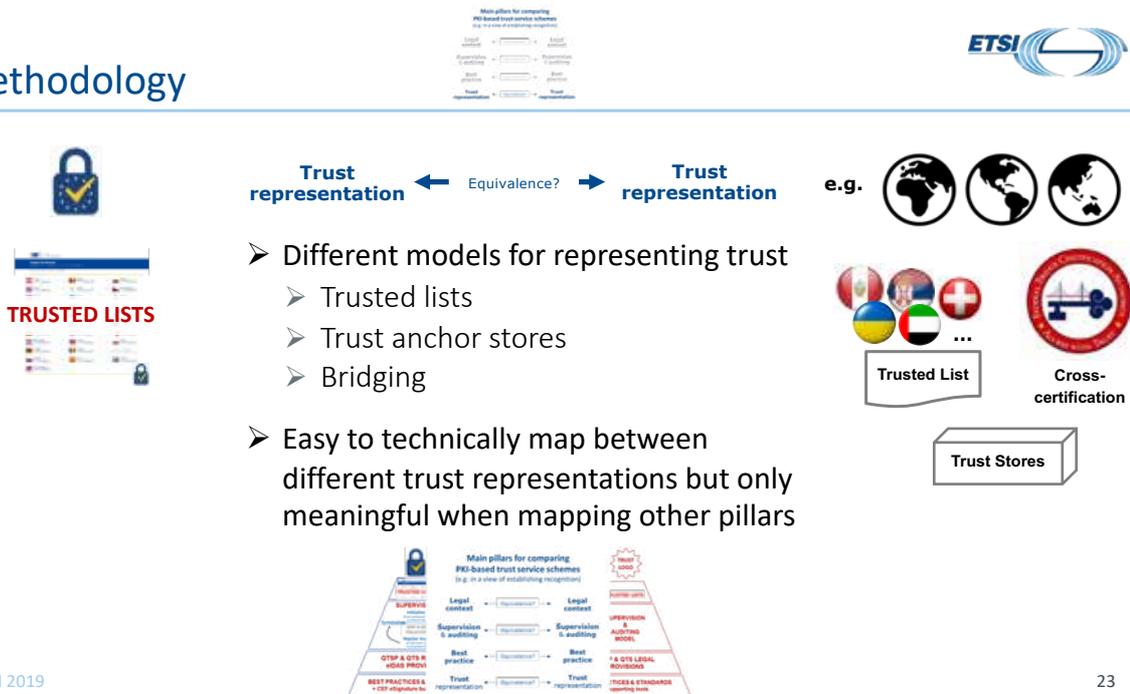
Methodology

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Methodology



Methodology



Study report

- **Publication January 2020 (TR 103 684)**
 - Investigate existing PKI-based trust service schemes and their trust model around the world
 - Identify technical basis for mutual recognition
 - Identify barriers & proposed solutions
- **Analyses 37 existing schemes**
- **The study concludes with 20 recommendations**

UNCITRAL
ISO/IEC 21188
ISO/IEC 27099
WebTrust® for CA
CA/Browser Forum
IMRT-WG (EU, JP, US)
Kantara

Adobe AATL
CertiPath
SAFE-BioPharma®
Google Chrome
Apple
Microsoft
Mozilla



Switzerland
AAECA Net
Israel
Sultanate of Oman
UAE
Botswana



Canada
México
US Federal PKI
Argentina
Bolivia
Brazil
Chile
Columbia
Paraguay
Peru
Uruguay



China
Hong Kong
India
Japan
APKIC
Russia

Report results – Comparison overview

- **Legal context**
 - Regulatory vs Agreement-based ... two different worlds, with (difficult) interactions
 - Facilitators (e.g. UNCITRAL, eIDAS as leading examples) & barriers (e.g. differences in TS provisions, in recognition provisions)
- **Supervision & auditing**
 - In place, with pre-authorisation, in most countries & agreement-based realms
 - Differences in auditing framework (e.g. national, IAF/ILAC MLA ISO/IEC 17065/21, ad hoc commercial)
- **Best practice**
 - Many commonly used international standards (e.g. X.509, RFC5280/3647, ETSI ESI standards)
 - Still many possible different interpretations / divergent implementations / different levels of details
- **Trust representation**
 - Technically not an issue (e.g. Root store, trusted lists, mixed & bridges) ... so far no eIDAS Art.14 concrete activation
 - One visible implementation ... Adobe integration of EU MS trusted list based validation of QESig/QESeal

Update on United Nations “Commission on International Trade Law” Working Group IV (Electronic Commerce)

- **Objective:** Creating a global standard for the recognition of eID and Trust Services in B2B for trade.
- Draft Provisions on the Cross-Border recognition of Identity Management and Trust Services:
 - Holistic approach embracing digital eIDs and trust services
 - Based on key principles and elements of eIDAS federating model
 - “Trust service means an electronic service that provides a certain level of **reliability** in the qualities of data”
 - “**Reliable Trust Services**” versus “Qualified Trust Services”
- Constructive approach of key countries (US/CAN/JP/RUS/CHINA/SGP)
Willingness to advance to concrete outcomes.
- Next session #60 (6-9 April 20, New York): Need to keep up the positive momentum for a successful outcome!

