DATA SYSTEMS



elDAS Review TSP Perspective

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elDAS Beginnings

CA/QC for eSeals

- Estonia alone with one service
- Provided by:
 - Sertifitseerimiskeskus

Qualified Validation Services for eSignatures

- Sweden alone with one each for eSignatures and eSeals
 - TrustWeaver Validation
 Services

NIMBUS

Estonia

Sweden 1, 1 Qualified Website Authentication Certificates

TSA/QTST – Time Stamp CAs

• Only 6 Member States

• Germany: 100 CAs in total

• Currently 0 services offered in all of Europe!



EU in 2016

Estonia 1

> Romania 1

Poland 1

A few innovators, market testers

No supply chains established

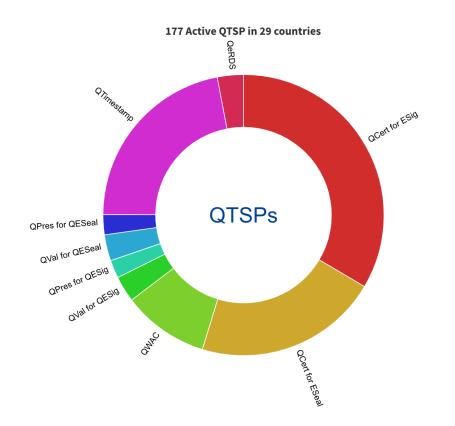
Limited demand for trust services (market awareness)

Strong commitment of regulators and players already present on the market to introduce eIDAS Trust Services

NIMBUS Technologieberatung GmbH

Technologius Arting Chart Source: CA Day 2016 – Arno Fiedler, Andrea Rock

eIDAS Growing EU Market



Source: https://webgate.ec.europa.eu/tl-browser/#/dashboard 2019-09-18



EU in 2019

Supply chains established (HSMs market still concentrated – see EC QSCD list)

Double speed demand growth: 1st SIG, SEAL, TSTMP, VAL, 2nd: QWACS, REM, EDEL

SMEs and individuals still need to be subsidiarized

HPC, HA challenges ahead (5G, Industry 4.0)

New technological drivers (eID, VideoID, AI, IoT, Data Chaining)

New threats arising (Quantum Safe Trust Services)

Still lot of to do in cooperation with non-EU counties

Qcert Enrollment

- Harmonized risk management identity verification
- Harmonized supervision unified supervision rules

Article 24

Requirements for qualified trust service providers

1. When issuing a qualified certificate for a trust service, a qualified trust service provider shall verify, by appropriate means and in accordance with national law, the identity and, if applicable, any specific attributes of the natural or legal person to whom the qualified certificate is issued.

(d)by using other identification methods recognised at national level which provide equivalent assurance in terms of reliability to physical presence. The equivalent assurance shall be confirmed by a conformity assessment body. Focus on unified risk profile for EU MS – e.g. videoidentification

Role of SB to create balanced competitive situation (SB policies)



Signatures / Seals

- **HPC approach on M2M use cases** e.g. need for QSCD duly operated by TSP under physical control of Signatory
- Lack of crypto-agility business drivers needed (e.g. ECC roots, QS safe roots)
- **TSP supply chain management** security of investment (CID amendments impact)
- Information policy EC QSCD list vs compliance status technology adoption
- Legal effects enhancements for electronic Seals declaration of intent (with <u>assumption of sole control</u> for legal person)



Standardisation impact on High Performance Computing and in general non-functional requirements of modern systems (interoperability should lead us to business efficiency)

CEN TS 419 221-6 – opens new HPC Use Cases

How CID amendments change the business rules (balance between business goals of vendors, TSPs and customers)

QSCD Notification ambiguities (EC list only informative, ...,,duly operated by a QTSP"...)



Validation and Preservation



- **Trust Services synergies need to be explored** e.g. prevalidation of Remote QSCD Certificates not widely adopted
- **Business value underestimated** growing supply of solution partially mitigating risks (low quality non-qualified services)
- EU 3rd countries validation trust bridges need to be established



Crucial services for the EU trust ecosystem

Lots of signatures created by individuals have at least minor errors

CID driving the quality (linking with EN)

Global Players / Third Countries





Need to work on trust models with third countries

Motivate 3rd countries communities to contribute in development of eIDAS ecosystem

Article 14 business drivers needed – EU funds?

Thank you.

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