HARICA

Trust Services Market
5 years after
Challenges, Opportunities and next steps

Dimitris Zacharopoulos

HARICA

A few words about HARICA

- HARICA (www.harica.gr) is supported/funded by GUnet, a non-profit civil company
- HARICA established in 2006
- Offers a variety of Trust Services
  - Certificates (eSignature, eSeal, QWAC, SSL/TLS, Code Signing, S/MIME, Client Authentication)
  - Qualified Time-Stamps
  - Remote QSCD

✓ HARICA

Challenges

- Two "types" of Trust Service Providers
  - TSPs that were already experienced and evaluated under **externally audited** Trust Schemes (e.g. Publicly-Trusted Certificates)
  - TSPs that were not
- Lack of harmonization
  - Lack of mandatory audit or technical schemes
  - Different interpretations among eIDAS stakeholders (SBs, TSPs, CABs)
- Some conflicts between standards (IETF, CABF, ETSI)
- Lack of transparency

HARICA

Opportunities

- Fix existing problems already reported and analyzed
- Extend eIDAS beyond just EU
- Improved interoperability with popular Software Vendors

Next Steps

- Learn from existing, more "mature" Public Trust Frameworks
- Increase transparency for increased trust
- Take steps for harmonization
- Create environment for healthy competition among QTSPs
  - Secure policies/practices
  - Balance costs and prices

Create **truly trustworthy** cross-border Trust Services for EU

Collaboration between Industry Experts

- Several Forums/Organizations

Thank you

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TRUST SERVICES MARKET

Viky Manaila
Trust Services Director – Intesi Group

ENISA Trust Services Forum – Berlin, 21st September

Brussels - 2014, 14th October, eIDAS Regulation launching

"That is what we have delivered through our regulation on eIdentification and Trust services.
A stable framework for secure services.
A single set of rules for the whole of Europe.
Offering convenience and confidence for every online consumer, every government, every business.
A framework based on interoperability.
Risk management. And sound principles: like transparency, trust, and technology neutrality.
That is an essential ingredient to take the EU's single market – our crown jewel – and make it work in the digital era." – **Neelie KROES**, Vice-president

of the European Commission responsible for the Digital Agenda
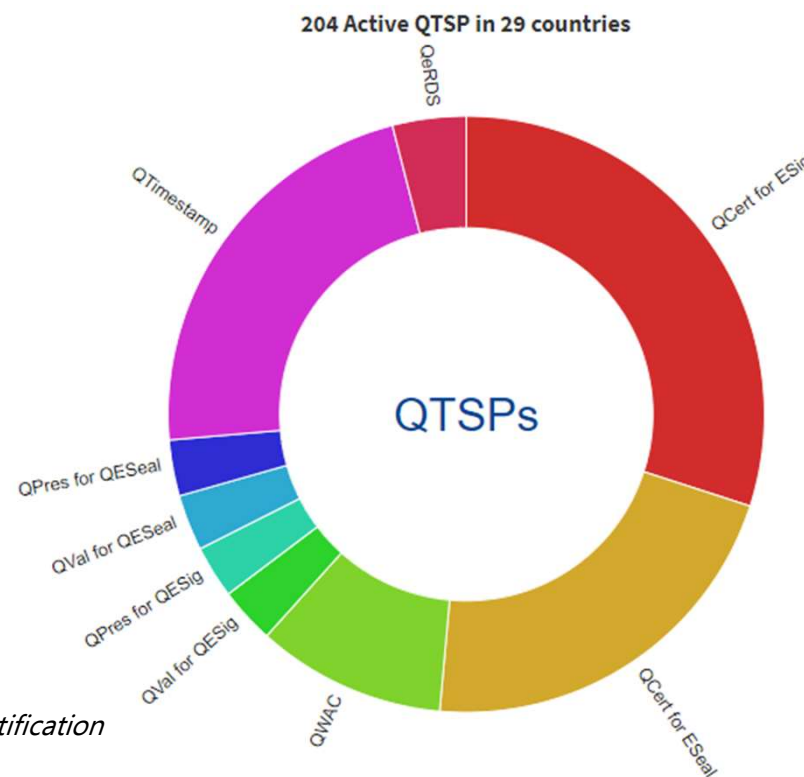

Foto credit: Riccardo Genghini

The Good

- created a European market with common rules
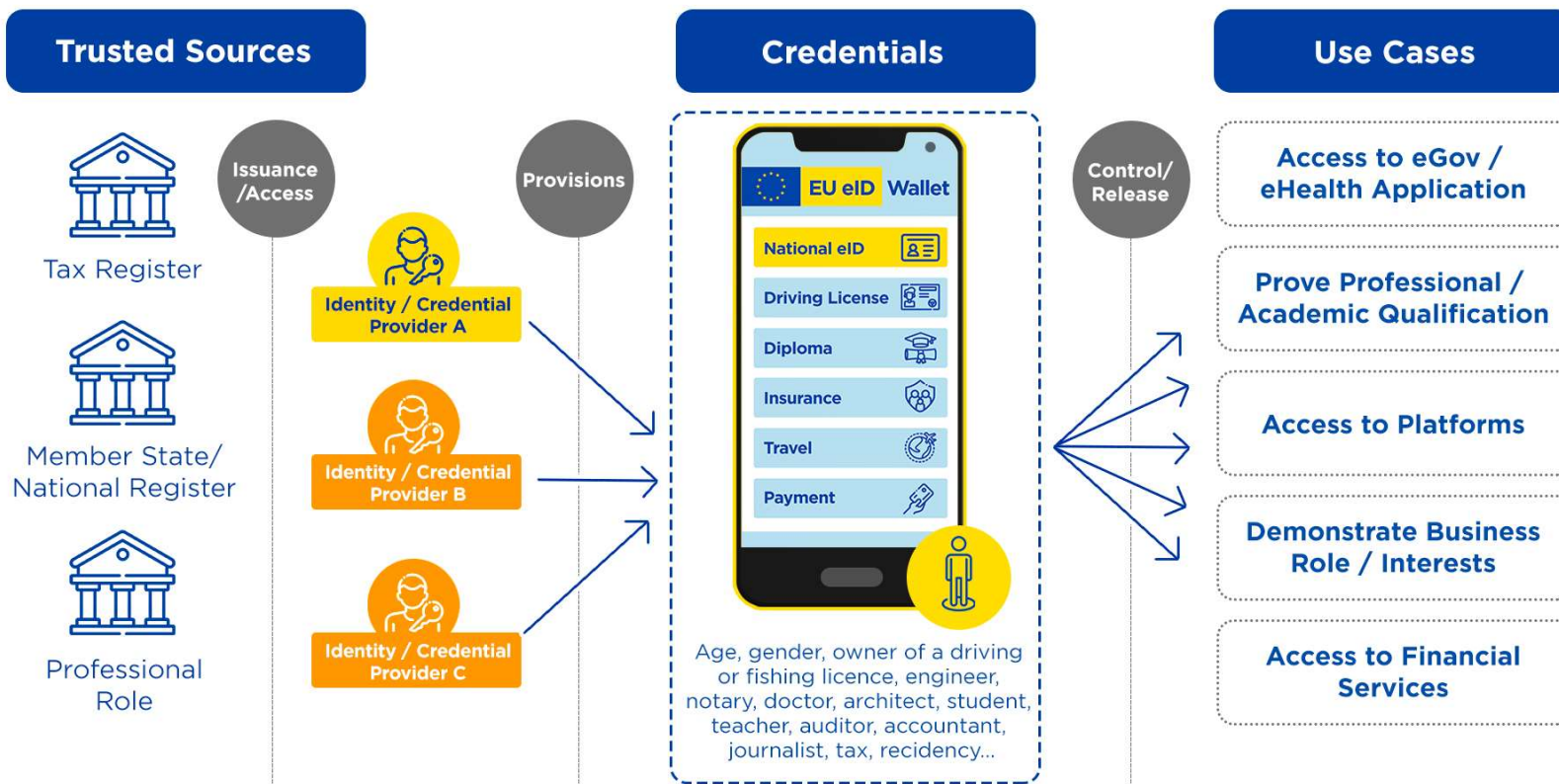- Improved trust and confidence in the security, quality and availability of trust services

The Bad

- Increased demand by public and private services for trusted identification and exchange of digital attributes not met
- 41% of the EU population does not have access to any trusted and secure eID scheme across borders
- Diverse and ineffective conditions for private online service providers cannot rely on eIDs cross-border

The Beauty

- eIDAS 2.0 proposal changing the framework for trusted identities
- Harmonized requirements on remote identity verification, remote identification and its equivalence to physical presence
- EUeID Wallet empowering citizens to secure share their personal data

204 Active QTSP in 29 countries

QeRDS
QCert for ESig
QTimestamp
QPres for QESeal
QVal for QESeal
QPres for QESig
QVal for QESig
QWAC
QCert for ESeal

QTSPs

EUeID - Ecosystem

Trusted Sources

Tax Register

Member State/
National Register

Professional
Role

Issuance
/Access

Identity / Credential
Provider A

Identity / Credential
Provider B

Identity / Credential
Provider C

Provisions

Credentials

EU eID Wallet

National eID

Driving License

Diploma

Insurance

Travel

Payment

Age, gender, owner of a driving
or fishing licence, engineer,
notary, doctor, architect, student,
teacher, auditor, accountant,
journalist, tax, recidency...

Control/
Release

Use Cases

Access to eGov /
eHealth Application

Prove Professional /
Academic Qualification

Access to Platforms

Demonstrate Business
Role / Interests

Access to Financial
Services

Thank You!

VIKY MANAILA

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ENISA Trust Services Forum
Berlin, 21st September

Tomas Gustavsson
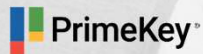
Tomas Gustavsson

PrimeKey Co-founder and CTO

Security and PKI since 1994

Founder of EJBCA Open Source PKI
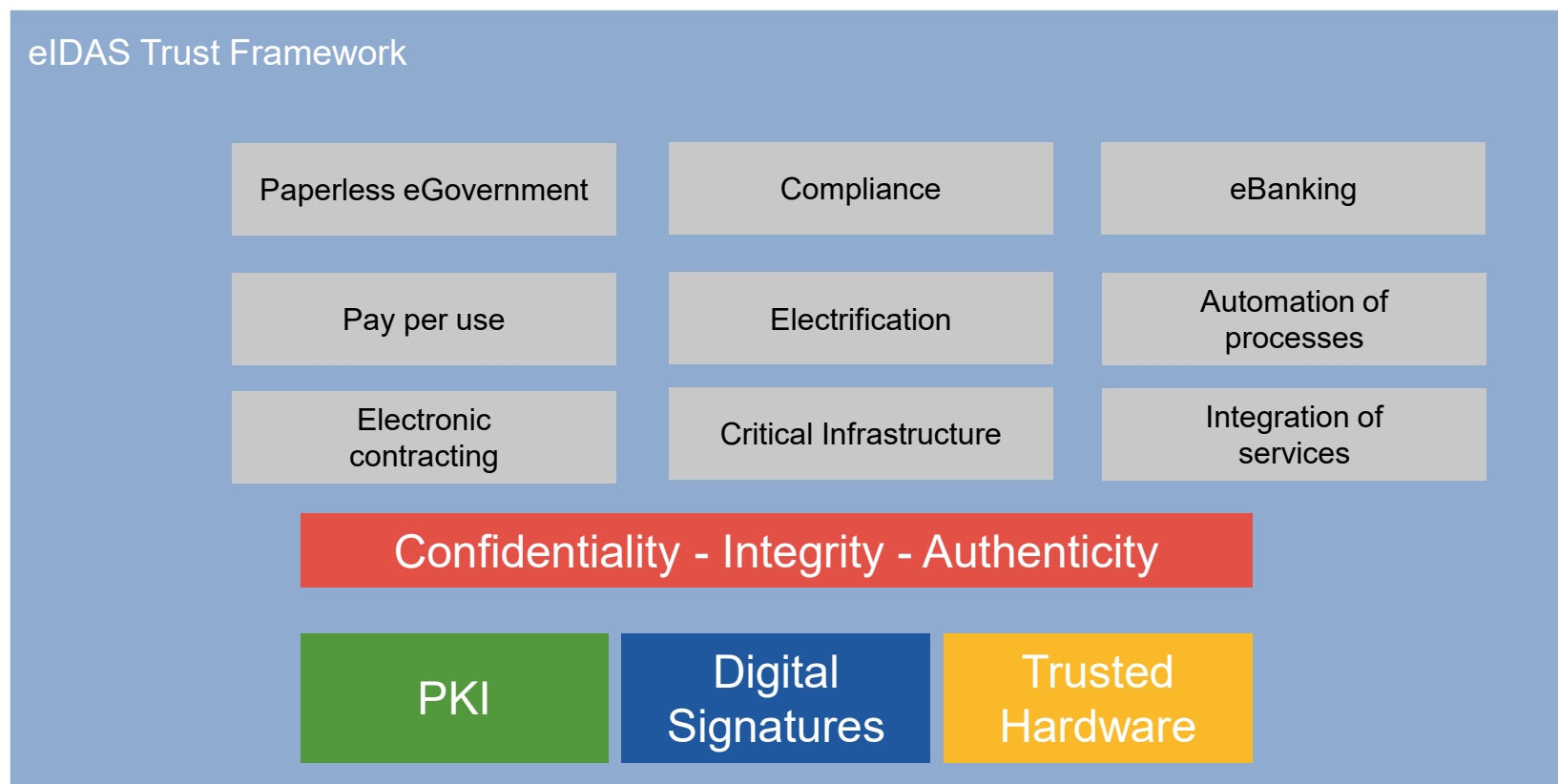
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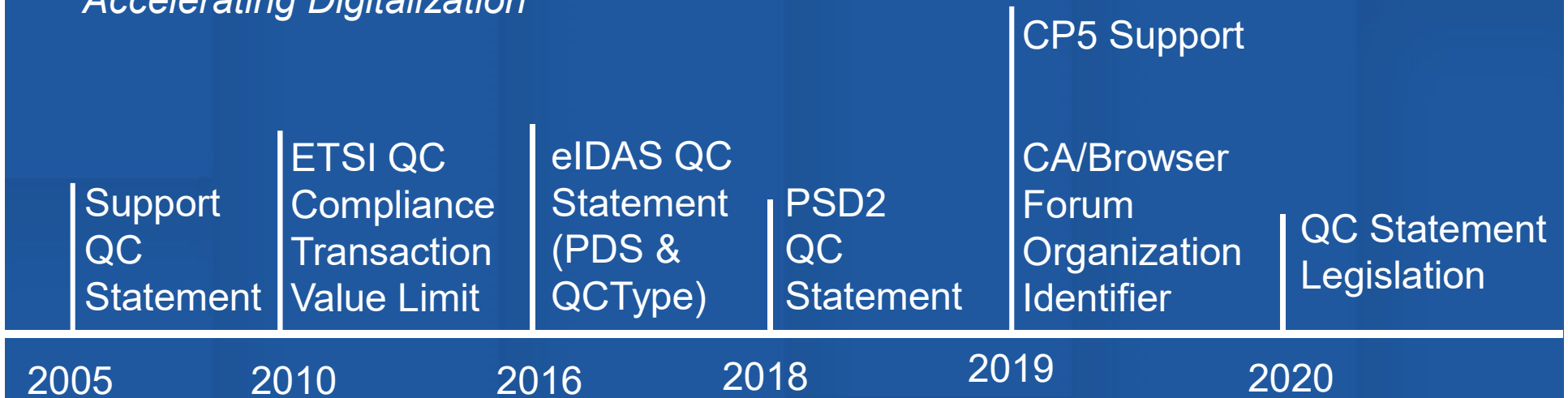
PKI
Global Trends

Public-key encryption, digital signatures, and secure key exchange "are the heart and blood" of digital identity and trust.

The foundation to **digital value chains**

eIDAS Trust Framework

Paperless eGovernment	Compliance	eBanking
Pay per use	Electrification	Automation of processes
Electronic contracting	Critical Infrastructure	Integration of services

Confidentiality - Integrity - Authenticity

PKI | Digital Signatures | Trusted Hardware

"Accelerating Digitalization"

CP5 Support

| Support QC Statement | ETSI QC Compliance Transaction Value Limit | eIDAS QC Statement (PDS & QCType) | PSD2 QC Statement | CA/Browser Forum Organization Identifier | QC Statement Legislation |

2005　　　2010　　　2016　　　2018　　　2019　　　2020

Each year new development occur, in an accelerating pace

Challenges - Competence

```
Number 1: Legal Person
id-etsi-qcs-1 (OID = 0.4.0.1862.1.1) id-etsi-qcs-QcCompliance
id-etsi-qcs-4 (OID = 0.4.0.1862.1.4) id-etsi-qcs-QcSSCD
id-etsi-qcs-5 (OID = 0.4.0.1862.1.5) id-etsi-qcs-QcPDS = https://example.com/repository
id-etsi-qcs-6 (OID = 0.4.0.1862.1.6) id-etsi-qcs-QcType = 2
id-qcs-pkixQCSyntax-v2 (OID = 1.3.6.1.55.7.11.2) with SematicsID = 0.4.0.194121.1.2

Number 2: Legal Person with SSCD
Number 3: Natural Person
Number 4: Natural Person with SSCD
Number 5: Natural Person with SematicsID
Number 6: Natural Person with SSCD and SematicsID
```

- Needs specific competence
  - Customers ask us, we ask them, ...
  - Can a cert be for both a natural and a legal person?

Opportunities

- Continue to make e-services easy to consume

    – For persons

    – For organizations

    – For machines(?)

- Continue to enable new use cases

    – Where applicable

    – Without uneccesary burden

Security should not be difficult or expensive to add early in a project