Connecting Europe Facility

CEF eSignature Building Block: Legislation and Standards

ETSII Security Week

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What does the Connecting Europe Facility (CEF) finance?

Funding for the European Commission

**Services** offered by the European Commission

- eJustice Portal
- ODR
- Open Data
- BRIS
- EESSI, etc.

**Building Blocks**

- IDENTIFY with eID
- SIGN with eSignature
- INVOICE with eInvoicing
- EXCHANGE with eDelivery
- TRANSLATE with eTranslation

Funding for the Member States

**Grants** - Projects in the Member States

Typically 'deployment' projects at national level (up to 75% of eligible cost)
What the CEF eSignature Building Block does

- **List of Trusted Lists**

  - **Trusted List Manager**
    - Management of:
      - Member States' Trusted Lists
      - List of Trusted Lists.

  - **Trusted List Browser**
    - User-friendly
    - Mobile-friendly
    - Browsing of Trusted Lists.

  - **DSS open-source library**
    - Creation
    - Validation
    - Extension of eIDAS-compliant e-signatures and e-seals.
Legislation and Standards in the CEF eSignature Building Block

**Trusted Lists (TL Manager and Trusted List Browser)**

- eIDAS Regulation
  - Article 22: "Trusted Lists"
    - Paragraph 1: "Each Member State shall (...) publish trusted lists"
    - Paragraph 5: "the Commission shall, by means of implementing acts, specify (...) paragraph 1"
      - Commission Implementing Decision (EU) 2015/1505 laying down technical specifications and formats relating to trusted lists
        - ETSI TS 119 612 v.2.1.1: "Trusted Lists"
Legislation and Standards in the CEF eSignature Building Block

E-signature creation and validation (DSS open-source library)

- eIDAS Regulation
  - Article 27: "Electronic signatures in public services"
  - Paragraph 1: "If a Member State requires an advanced electronic signature (...), that Member State shall recognise advanced electronic signatures (...) and qualified electronic signatures in (...) the formats (...) in paragraph 5"
  - Paragraph 5: "The Commission shall, by means of implementing acts, define reference formats of advanced electronic signatures"
    - Commission Implementing Decision (EU) 2015/1506 laying down specifications relating to formats of advanced electronic signatures and advanced seals to be recognised by public sector bodies
      - ETSI TS 103 17x: "XAdES/PAdES/CAdES/ASiC Baseline Profile"
      - New standards: ETSI EN 319 1x2 may be included in updated CID (EU) 2015/1506
Validation of Qualified Electronic Signatures

eIDAS Regulation, Article 32

Requirements for the validation of qualified electronic signature

1. The process for the validation of a qualified electronic signature shall confirm the validity of a qualified electronic signature provided that:
   • [Advanced electronic signature]
   • [Qualified certificate]
   • [Qualified Signature Creation Device]
   • [Miscellaneous requirements]
Validation of Qualified Electronic Signatures

eIDAS Regulation, Article 32

2. The system used for validating the qualified electronic signature shall provide to the relying party the correct result of the validation process and shall allow the relying party to detect any security relevant issues.

3. The Commission may, by means of implementing acts, establish reference numbers of standards for the validation of qualified electronic signatures. Compliance with the requirements laid down in paragraph 1 shall be presumed where the validation of qualified electronic signatures meets those standards. [...]
Gaps

- ETSI TS 119 172 - 4
  - "Signature Policies; Part 4: Signature validation policy for European qualified electronic signatures/seals using trusted lists"
  - Not yet public, but DSS is based on the draft. No implementing act
  - Plugtest(s)
- Additionally, use of ETSI TS 319 102 -1
  - "Procedures for Creation and Validation of AdES Digital Signatures; Part 1: Creation and Validation"
  - No implementing act
- ETSI TS 119 102-2
  - Procedures for creation and validation of AdES digital signatures; Part 2: signature validation report
Conclusions

Legislation to code (through standards)

- Benefits of standards:
  - Standards are the *raison d'être* of CEF eSignature Building Block

- Gaps:
  - Validation of qualified electronic signatures (ETSI TS 119 172 – 4)
  - Validation report (ETSI TS 119 102-2)
  - Plugtests