One Signature Certificates

Proposed new LAMPS WG item

https://github.com/Razumain/one-signature-certs

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Basic characteristics

- Used only for one signed document
  - Key pair generation
  - Certificate issued
  - Document signed
  - Private key destroyed
- Certificate never expires
  - notAfter field = GeneralizedTime 99991231235959Z
- No revocation
  - id-ce-noRevAvail extension
- Bound to one signature
  - New signedDocumentBinding extension

signedDocumentBinding extension

```
name                id-pe-signedDocumentBinding
OID                 { id-pe TBD }
syntax              SignedDocumentBinding
criticality         SHOULD be FALSE

SignedDocumentBinding ::= SEQUENCE {
dataTbsHash          OCTET STRING,
hashAlg              DigestAlgorithmIdentifier,
bindingType          UTF8String OPTIONAL }
```

bindingType

- **Default**
  - The bytes that are signed
  - Not usable if certificate data is signed (JWS, COSE, ETSI)
- **cades**
  - Exclude SigningCertificate and SigningCertificateV2 attributes from signedAttrs
- **xades**
  - Exclude Ref type http://uri.etsi.org/01903#SignedProperties from SignedInfo
- **jws and cose**
  - Hash payload only

Updates since last IETF

- Some nits
- Added Security Considerations Section
- Added IANA considerations Section

Open issues

- Wether to recommend using the **PrivateKeyUsagePeriod** extension as means to signal a time period within which the key was created and destroyed.

Next

- Call for adoption ended 2026-03-13
- Republish as LAMPS draft
- Resolve issues
- Add examples