

Validation Process for Basic Signatures (Best signature time : 2022-04-24 14:30:45 (UTC)) **PASSED**

- Is the result of the 'Format Checking' building block conclusive? ✔
- Is the result of the 'Identification of Signing Certificate' building block conclusive? ✔
- Is the result of the 'Validation Context Initialization' building block conclusive? ✔
- Is the result of the 'X.509 Certificate Validation' building block conclusive? ✔
- Is the result of the 'Cryptographic Verification' building block conclusive? ✔
- Is the result of the 'Signature Acceptance Validation' building block conclusive? ✔

Timestamp TIMESTAMP_PostSignum-TSA-TSU-2_20220222-1923 **PASSED**

- Validation Process for Time-stamps**
- (Production time : 2022-02-22 19:23:20 (UTC))
- PASSED**
- Is the result of the 'Identification of Signing Certificate' building block conclusive? ✔
 - Is the result of the 'X.509 Certificate Validation' building block conclusive? ✔
 - Is the result of the 'Cryptographic Verification' building block conclusive? ✔
 - Is the result of the 'Signature Acceptance Validation' building block conclusive? ✔

- Time-stamp Qualification**
- QTSA**
- Has a trusted list been reached for the certificate chain? ✔
 - Is the list of trusted lists acceptable? ✔
Trusted List : <https://ec.europa.eu/tools/lotl/eu-lotl.xml>
 - Is the trusted list acceptable? ✔
Trusted List : https://tsl.gov.cz/publ/TSL_CZ.xsl
 - Has been an acceptable trusted list found? ✔
 - Is the certificate related to a TSA/QTST? ✔
 - Is the certificate related to a trust service with a granted status? ✔
 - Is the certificate related to a trust service with a granted status at the production time? ✔

Validation Process for Signatures with Time and Signatures with Long-Term Validation Data (Best signature time : 2022-02-22 19:23:20 (UTC)) **PASSED**

- Is the result of the Basic Validation Process acceptable? ✔
- Is an acceptable revocation data present for the certificate? ✔
Latest acceptable revocation : OCSF_PostSignum-QCA-4-OCSF-Responder-1_20220424-1313
- Does the message-imprint match the computed value? ✔
Signature Timestamp with Id = TIMESTAMP_PostSignum-TSA-TSU-2_20220222-1923, production time = 2022-02-22 19:23
- Is the result of basic time-stamp validation process conclusive? ✔
Signature Timestamp with Id = TIMESTAMP_PostSignum-TSA-TSU-2_20220222-1923, production time = 2022-02-22 19:23
- Is the best-signature-time not before the issuance date of the signing certificate? ✔
Best-signature-time : 2022-02-22 19:23, certificate notBefore : 2020-03-18 10:20
- Are the time-stamps in the right order? ✔
- Is the signed qualifying property: 'signing-time' present? ✔
- Is the signing-time plus the time-stamp delay after best-signature-time? ⚠
- Is the signature acceptable? ✔

- Certificate Revocation Data Selector :**
- PASSED**
- Is the result of the revocation data basic validation process acceptable? ✔
Id = OCSF_PostSignum-QCA-4-OCSF-Responder-1_20220424-1313
 - Is the revocation acceptance check conclusive? ✔
Id = OCSF_PostSignum-QCA-4-OCSF-Responder-1_20220424-1313, thisUpdate = 2022-04-24 13:13, production time = 2022-04-24 13:13
 - Is an acceptable revocation data present for the certificate? ✔
Latest acceptable revocation : OCSF_PostSignum-QCA-4-OCSF-Responder-1_20220424-1313

Validation Process for Signatures with Archival Data (Best signature time : 2022-02-22 19:23:20 (UTC)) **PASSED**

- Is the result of the LTV validation process acceptable? ✔
- Is the result of the Time-stamp Validation Building Block acceptable? ✔
Signature Timestamp with Id = TIMESTAMP_PostSignum-TSA-TSU-2_20220222-1923, production time = 2022-02-22 19:23
- Is the result of basic time-stamp validation process conclusive? ✔
Signature Timestamp with Id = TIMESTAMP_PostSignum-TSA-TSU-2_20220222-1923, production time = 2022-02-22 19:23
- Is the digest algorithm reliable at lowest POE time for the time-stamp token? ✔
Digest algorithm SHA256 at validation time : 2022-04-24 14:30 for time-stamp message imprint with Id : TIMESTAMP_PostSignum-TSA-TSU-2_20220222-1923
- Does the message-imprint match the computed value? ✔
Signature Timestamp with Id = TIMESTAMP_PostSignum-TSA-TSU-2_20220222-1923, production time = 2022-02-22 19:23

Signature Qualification **AdESig-QC**

- Is the signature/seal an acceptable AdES digital signature (ETSI EN 319 102-1)? ✔
- Has a trusted list been reached for the certificate chain? ✔
- Is the list of trusted lists acceptable? ✔
Trusted List : <https://ec.europa.eu/tools/lotl/eu-lotl.xml>
- Is the trusted list acceptable? ✔
Trusted List : https://tsl.gov.cz/publ/TSL_CZ.xsl
- Has been an acceptable trusted list found? ✔
- Is the certificate qualified at (best) signing time? ✔

- Is the certificate type unambiguously identified at (best) signing time? ✔
- Is the certificate qualified at issuance time? ✔
- Does the private key reside in a QSCD at (best) signing time? !
 The private key does not reside in a QSCD at (best) signing time!

Certificate Qualification at certificate issuance time (2020-03-18 10:20:20 (UTC))

QC for eSig

- Is the certificate related to a CA/QC? ✔
- Is the trust service consistent? ✔
- Trust service name : (116) PostSignum - vydávání kvalifikovaných certifikátů
- Is the certificate related to a trust service with a granted status? ✔
- Is the certificate related to a consistent trust service declaration? ✔
- Can the certificate type be issued by a found trust service? ✔
- Does the trusted certificate match the trust service? ✔
- Is the certificate qualified at issuance time? ✔
- Is the certificate type unambiguously identified at issuance time? ✔
- Certificate type is for eSig
- Does the private key reside in a QSCD at issuance time? !
 The private key does not reside in a QSCD at issuance time!

Certificate Qualification at best signature time (2022-02-22 19:23:20 (UTC))

QC for eSig

- Is the certificate related to a CA/QC? ✔
- Is the trust service consistent? ✔
- Trust service name : (116) PostSignum - vydávání kvalifikovaných certifikátů
- Is the certificate related to a trust service with a granted status? ✔
- Is the certificate related to a consistent trust service declaration? ✔
- Can the certificate type be issued by a found trust service? ✔
- Does the trusted certificate match the trust service? ✔
- Is the certificate qualified at (best) signing time? ✔
- Is the certificate type unambiguously identified at (best) signing time? ✔
- Certificate type is for eSig
- Does the private key reside in a QSCD at (best) signing time? !
 The private key does not reside in a QSCD at (best) signing time!

Basic Building Blocks

SIGNATURE - SIGNATURE_RNDr-Ing-Jiří-Peterka_20220222-1923

Format Checking :

PASSED

- Does the signature format correspond to an expected format? ✔
- Is the signature identification not ambiguous? ✔
- Is the signed references identification not ambiguous? ✔
- Is only one SignerInfo present? ✔
- Do signed and final revisions contain equal amount of pages? ✔
- Is no element overlapping detected in the PDF? ✔
- Is there no visual difference between signed and final revisions in the PDF? ✔
- Does the document contain none of the undefined object modifications? ✔

Identification of the Signing Certificate :

PASSED

- Is there an identified candidate for the signing certificate? ✔
- Is the signed attribute: 'cert-digest' of the certificate present? ✔
- Does the certificate digest value match a digest value found in the certificate reference(s)? ✔

Validation Context Initialization :

PASSED

- Is the signature policy known? ✔

X509 Certificate Validation :

PASSED

- Can the certificate chain be built till a trust anchor? ✔
- Is the certificate validation conclusive? ✔
- Is the certificate validation conclusive? ✔

Certificate CERTIFICATE_RNDr-Ing-Jiří-Peterka_20200318-1020 :

PASSED

- Is the certificate unique? ✔
- Is a pseudonym used? ✔
- Is certificate not self-signed? ✔
- Is the certificate signature intact? ✔
- Does the signer's certificate have an expected key-usage? ✔
- Key usage : [DIGITAL_SIGNATURE, NON_REPUDIATION, KEY_ENCIPHERMENT]
- Is the authority info access present? ✔
- Is the revocation info access present? ✔
- Is the revocation data present for the certificate? ✔
- Is an acceptable revocation data present for the certificate? ✔
- Latest acceptable revocation : OCSP_PostSignum-QCA-4-OCSP-Responder-1_20220424-1313
- Is the certificate not revoked? ✔
- Is the certificate not on hold? ✔
- Is the revocation freshness check conclusive? ✔
- Id = OCSP_PostSignum-QCA-4-OCSP-Responder-1_20220424-1313

Are cryptographic constraints met for the signature's certificate chain? Signature algorithm RSA with SHA256 with key size 4096 at validation time : 2022-04-24 14:30	✓
Is the current time in the validity range of the signer's certificate? Validation time : 2022-04-24 14:30, certificate validity : 2020-03-18 10:20 - 2023-04-07 10:20	✓
Is the current time in the validity range of the certificate of the issuer of the revocation information? Issuer certificate CERTIFICATE_PostSignum-QCA-4-OCSP-Responder-1_20211015-1057 of revocation data OCSP_PostSignum-QCA-4-OCSP-Responder-1_20220424-1313 with validity range : 2021-10-15 10:57 - 2022-10-15 10:57 and validation time 2022-04-24 14:30	✓
Certificate Revocation Data Selector :	PASSED
Is the revocation acceptance check conclusive? Id = OCSP_PostSignum-QCA-4-OCSP-Responder-1_20220424-1313, thisUpdate = 2022-04-24 13:13, production time = 2022-04-24 13:13	✓
Is an acceptable revocation data present for the certificate? Latest acceptable revocation : OCSP_PostSignum-QCA-4-OCSP-Responder-1_20220424-1313	✓
Revocation Acceptance Checker :	PASSED
Is the revocation status known?	✓
Is it not self issued OCSP Response?	✓
Is the revocation data consistent? Revocation thisUpdate 2022-04-24 13:13 is in the certificate validity range : 2020-03-18 10:20 - 2023-04-07 10:20	✓
Is revocation's signature intact?	✓
Can the certificate chain be built till a trust anchor?	✓
Is certificate's signature intact? Id = CERTIFICATE_PostSignum-QCA-4-OCSP-Responder-1_20211015-1057	✓
Has the issuer certificate id-pkix-ocsp-nocheck extension? 2022-04-24T13:13:17Z	✓
Revocation Freshness Checker :	PASSED
Is the revocation information fresh for the certificate?	✗
Are cryptographic constraints met for the revocation data signature? Signature algorithm RSA with SHA512 with key size 2048 at validation time : 2022-04-24 14:30	✓
Trust Anchor (CERTIFICATE_PostSignum-Qualified-CA-4_20180927-0739)	PASSED
Cryptographic Verification :	PASSED
Has the reference data object been found? Reference : MESSAGE_DIGEST	✓
Is the reference data object intact? Reference : MESSAGE_DIGEST	✓
Is the signature intact?	✓
Signature Acceptance Validation :	PASSED
Is the structure of the signature valid?	✓
Is the signed attribute: 'signing-certificate' present?	✓
Is the signed attribute: 'signing-certificate' present only once?	✓
Does the 'Signing Certificate' attribute contain references only to the certificate chain?	✓
Is the signed qualifying property: 'signing-time' present?	✓
Is the signed qualifying property: 'message-digest' or 'SignedProperties' present?	✓
Are cryptographic constraints met for the signature creation? Signature algorithm RSA with SHA256 with key size 2048 at validation time : 2022-04-24 14:30	✓
Are cryptographic constraints met for the message digest? Digest algorithm SHA256 at validation time : 2022-04-24 14:30 for message digest	✓
Are cryptographic constraints met for the signing-certificate reference? Digest algorithm SHA256 at validation time : 2022-04-24 14:30 for signing-certificate reference with Id : CERTIFICATE_RNDR-Ing-Jiri-Peterka_20200318-1020	✓
Basic Building Blocks	
TIMESTAMP - TIMESTAMP_PostSignum-TSA-TSU-2_20220222-1923	
Identification of the Signing Certificate :	PASSED
Is there an identified candidate for the signing certificate?	✓
Is the signed attribute: 'cert-digest' of the certificate present?	✓
Are the issuer distinguished name and the serial number equal?	✓
X509 Certificate Validation :	PASSED
Can the certificate chain be built till a trust anchor?	✓
Is the certificate validation conclusive?	✓
Trust Anchor (CERTIFICATE_PostSignum-TSA-TSU-2_20210909-0909)	PASSED
Cryptographic Verification :	PASSED
Has the message imprint data been found?	✓
Is the message imprint data intact?	✓
Is time-stamp's signature intact?	✓
Signature Acceptance Validation :	PASSED
Is the signed attribute: 'signing-certificate' present?	✓
Does the 'Signing Certificate' attribute contain references only to the certificate chain?	✓
Does the TST Info field: 'tsa' match the time-stamp's issuer name?	✓
Are cryptographic constraints met for the time-stamp signature? Signature algorithm RSA with SHA256 with key size 2048 at validation time : 2022-04-24 14:30	✓

Are cryptographic constraints met for the time-stamp message imprint?
Digest algorithm SHA256 at validation time : 2022-04-24 14:30 for time-stamp message imprint



Basic Building Blocks

REVOCACTION - OCSP_PostSignum-QCA-4-OCSP-Responder-1_20220424-1313

Identification of the Signing Certificate :

PASSED

Is there an identified candidate for the signing certificate?



X509 Certificate Validation :

PASSED

Can the certificate chain be built till a trust anchor?



Is the certificate validation conclusive?



Is the certificate validation conclusive?



Certificate CERTIFICATE_PostSignum-QCA-4-OCSP-Responder-1_20211015-1057 :

PASSED

Is the certificate signature intact?



Has the issuer certificate id-pkix-ocsp-nocheck extension?



Are cryptographic constraints met for the revocation data's certificate chain?



Signature algorithm RSA with SHA256 with key size 4096 at validation time : 2022-04-24 14:30

Is the current time in the validity range of the signer's certificate?



Validation time : 2022-04-24 14:30, certificate validity : 2021-10-15 10:57 - 2022-10-15 10:57

Trust Anchor (CERTIFICATE_PostSignum-Qualified-CA-4_20180927-0739)

PASSED

Cryptographic Verification :

PASSED

Is revocation's signature intact?



Signature Acceptance Validation :

PASSED

Are cryptographic constraints met for the revocation data signature?



Signature algorithm RSA with SHA512 with key size 2048 at validation time : 2022-04-24 14:30

List Of Trusted Lists EU

PASSED

Is the trusted list fresh?



Is the trusted list not expired?



Does the trusted list have the expected version?



Is the trusted list well signed?



Trusted List CZ

PASSED

Is the trusted list fresh?



Is the trusted list not expired?



Does the trusted list have the expected version?



Is the trusted list well signed?

