

Implementation of qualified electronic signatures in the process
of creating project and technical documentation
The experiences of member countries of the ECEC -
Austria



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Agenda

Legal background

Electronic signatures in Austria

How it relates to Engineers: Electronic signatures and Public Procurement

How it relates to Engineers: Electronic signatures and bAIK document archive



Legal background

EU

OLD: **Directive 1999/93/EC** of the European Parliament and of the Council of 13 December 1999 on a Community framework for electronic signatures .

NEW: **Regulation (EU) No 910/2014** of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC .

Legal background

Austria:

Austrian federal act on electronic signatures (Signaturgesetz - SigG)
transposes EU Directive 1999/93

Regulation of Federal Chancellor on electronic signatures
(Signaturverordnung) concretizes the federal law (Signaturgesetz) e.g. in
terms of technical frameworks

**Electronic signature links an electronic document with electronic data
which proves the identity of the signatory and the integrity of the signed
document (complex security standards)**

Electronic Signatures in Austria

The preparation of an electronic signature requires a **certificate** (electronic confirmation that links personal data of the signatory with a public key)

Certification service provider bears liability for the qualified certificate (§ 23 SigG)

The signature law differentiates between a “**simple**” and a **qualified certificate**.

Requirements of **qualified signature**:

- clearly assignable to a specific **natural** person (signator)
- undoubted confirmation of identification of signator

Electronic Signatures in Austria

Type of qualified signature	Impacts and applications
Qualified signature	Authenticity, integrity, encryption, replacement of signature
Advanced signature	Authenticity, integrity, encryption; Main field of application: electronic accounting
„Simple“ signature	Dependent on service provider, effect underlies free appraisal of evidence
Official signature	Under the terms of the E-Government legislation, enforced exclusively by the government

Electronic Signatures in Austria

Citizen Card (Bürgerkarte) – free of charge

- carries out identification and authentication using the identity link and the signature on the citizen card

- chip card (card reader is necessary)

Mobile phone signature – free of charge

- is a fully functional citizen card that can be activated on the mobile phone

Both can be used as **legally valid signatures in the Internet and are equal to handwritten signatures**. Both are virtual identity cards that can be used in the Web as for example passport or driving licence. They can be used to sign documents and invoices digitally.

Applications (examples):

E-Government - Communications with public authorities (applications, inspections, etc); B2B, C2C, B2C - Online-banking, Public Procurement, electronic invoicing, contracts etc.

Electronic Signatures in Austria

Exclusive electronic signatures for public authorities and professional groups:

Administrative signature

Electronic signature of justice

Electronic archive signatures:

Electronic certification signature of notaries

Electronic lawyer signature

Electronic certification signature of Architects and Chartered Engineering Consultants (they are legally obliged to use electronic signatures for official documents)

How it relates to engineers: Electronic Signatures and Public Procurement

Electronic tendering

will be obligatory (transposition in Austrian national law currently ongoing)

- in public procurement procedures by Federal Ministries **from 2017**,

- in public procurement procedures by Communities and Federal States **from 2018**

Tenders without valid electronic signature will have to be eliminated!

How it relates to engineers: Electronic Signatures and bAIK document archive

Electronic Document archive of the Austrian Architects and Chartered Engineering Consultants (bAIK-archive):

Sovereignly managed archive for the **safe storage of (public) documents**

Run duration: 30 years

Secure data retrieval via Internet at all times

Base for electronic document traffic of architects and chartered engineering consultants (ZT) with public authorities and courts

How it relates to engineers: Electronic Signatures and bAIK document archive

Legal base:

Professional Act for Architects and Chartered Engineering Consultants
(Ziviltechnikergesetz)

Chamber Act (Ziviltechnikerkammergesetz)

Signature Cards – Regulation of bAIK

Document archive – Regulation of bAIK

Technical requirements for the archive

PC + Internet

Signature Cards with qualified Certificate

Software

Card reader

How it relates to engineers: Electronic Signatures and bALK document archive

The archive is currently used by approximately **350 Chartered Engineering Consultants** – mainly Geodetic Surveyors – that are legally obliged to bring in public documents (§ 16 (1) ZTG)

Approximately 35.000 cases / year

The legally regulated retention period is currently 30 Jahre for public and private documents.

How it relates to engineers: Electronic Signatures and bAIK document archive

Signature Costs

Fees (plus VAT):

Issuing signature card € 36

One-time activation of qualified certificates € 10

Annual fee of qualified certificates € 13

Administrative charge for tax office concerning fees and transaction taxes € 14,30

One-time costs (computer + internet are assumed):

Simple bAIK archive starter package (free of charge) including software and instructions

Chip card reader € 50 - € 180

How it relates to engineers: Electronic Signatures and bAIK document archive

Signature Costs


Running costs per document

Fees (excl. VAT) for storage of public and private documents including all enclosures and documents dependent on data volume:

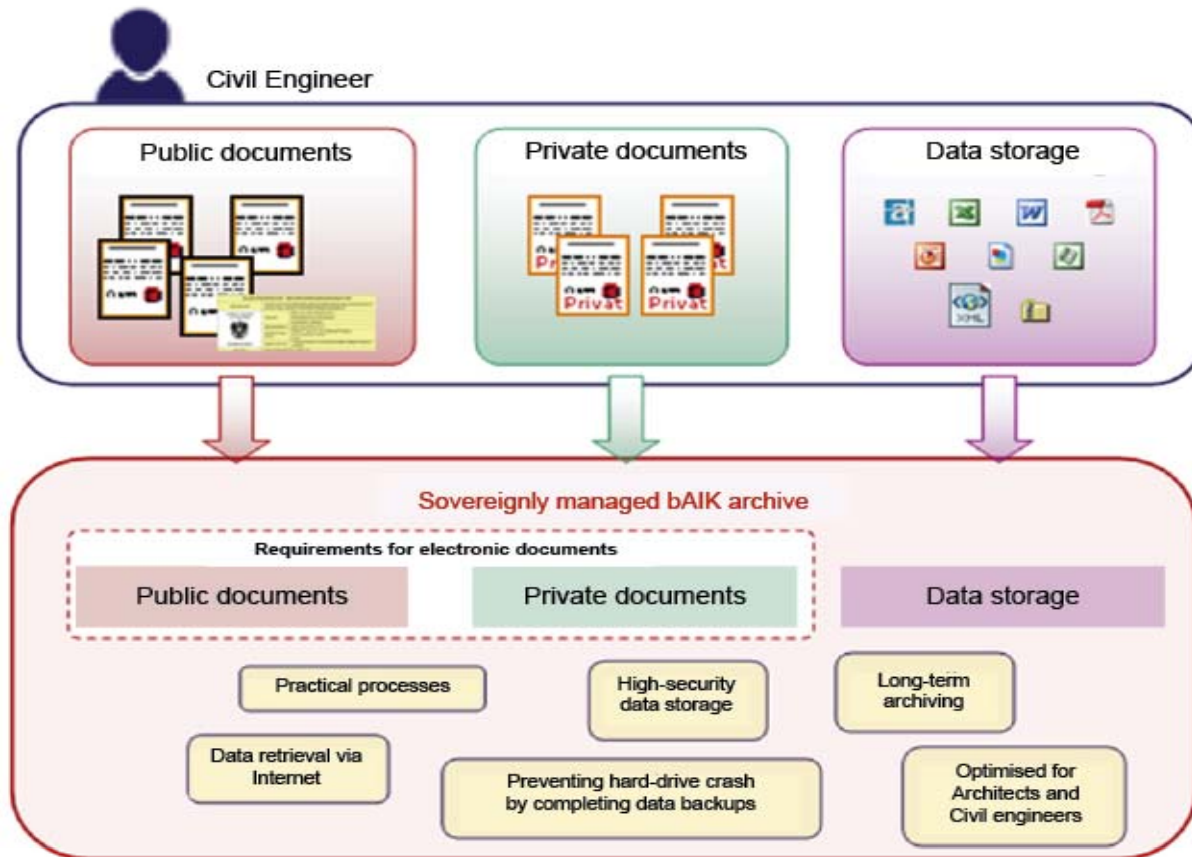
a. up to 5 MB	21,30 EUR
b. 5 to 10 MB	29,20 EUR
c. 10 to 15 MB	36,55 EUR
d. per every further 10 MB to 75 MB	13,00 EUR
e. 75 to 250 MB	126,95 EUR
f. 250 to 500 MB	190,95 EUR
g. per ever further 500 MB	126,95 EUR

Fees (excl. VAT) for storage of data dependent on data volume:


a. up to 5 MB	16,95 EUR
b. 5 to 10 MB	22,60 EUR
c. 10 to 15 MB	28,35 EUR
d. per every further 10 MB to 75 MB	11,30 EUR
e. 75 to 250 MB	106,70 EUR
f. 250 to 500 MB	160,05 EUR
g. per every further 500 MB	106,70 EUR



How it relates to engineers: Electronic Signature and bAIK document archive



How it relates to engineers: Electronic Signatures and bALK document archive

ELEKTRONISCHE BEURKUNDUNGSSIGNATUR		
Signaturwert	NDIUmOrPP3Igi4pRxgxbR3jgK5WvjKck9POJLWUk1pG7ybsnCHwVKQRBW9hMCCAR	
<p>staatlich befugter und beeideter</p>  <p>Ziviltechniker</p>	Signator	Peter Wagner Ingenieurkonsulent für Informatik Kanzleisitz: Wien
	Signaturdatum	2008-01-19T20:10:49
	Zertifizierungsdienst	CN=a-sign-Premium-Sig-02,OU=a-sign-Premium-Sig-02, O=A-Trust Ges. f. Sicherheitssysteme im elektr. Da tenverkehr GmbH,C=AT
	Seriennummer	225085
	Algorithmus	http://www.w3.org/2007/05/xmldsig-more#ecdsa-ripemd160
	Methode	urn:pdfsigfilter:bka.gv.at:binaer.v1.0.0
	Hinweis:	Dokumentenformat: ISO 19005-1:2005 PDF/A-1b

How it relates to engineers: Electronic Signatures and bAIK document archive

ELEKTRONISCHE ARCHIVSIGNATUR		
Signaturwert	SCU5LslsWGc8/OB5jJe5QXffTRoey/3zJgqK4fOotiwU3Xu02AWjCDuTFwY30T5dkvj4sI2FwAQ BnN2CjtzmfjfsBJwNHByfOsdMMo7OPCfv5le4m5CsEBTiXKYyxUr1CDMoWBRoKngz3CEWi0O0qu zTjsLFcqNMNBxaTPvimJA=	
	Signator	BAIK-Archiv Urkundenarchiv der Bundeskammer für Architekten und Ingenieurskonsulenten
	Signaturdatum	2008-01-16T08:57:12
	Zertifizierungs- dienst	CN= SIG 01,OU= te SIG 01,O=IT Solution GmbH,C=AT
	Seriennummer	4806908
	Algorithmus	http://www.w3.org/2001/04/xmldsig-more#rsa-sha256
	Methode	urn:pdfsigfilter:bka.gv.at:binaer:v1.0.0
	Hinweis:	Dokumentenformat: ISO 19005-1:2005 PDF/A-1b

Thank you for your attention!

