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# eIDAS regulation 23 july 2014 : the trust services

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## I. Introduction

## **II.** Trust services



## European regulation on electronic identification and trust services for electronic transactions of July 23rd 2014



Complete transnational and cross-sector framework for electronic transactions

- electronic identification (state)
- trust services





Harmonization of the national regulations concerning the electronic signature / no transposition to come into the legal systems of the 28 Members States

Numerous **implementing acts** for the trust services (including for the signature) and some **delegated acts**.



## Definition of a Trust service (art. 3 - 16)

« Trust service means an electronic service normally provided for remuneration which consist of :

- a) the creation, verification and validation of electronic signatures, electronic seals or electronic time stamps, electronic registred delivery services and certificates related to those services; or
- b) The creation, verification and validation of certificates for website authentication; or
- c) The preservation of electronic signatures, seals or certificates related to those services ».

A qualified trust service means a trust service that meets the applicable requirements laid down in this regulation (art. 3-17) (Annex 1 to 4) and shall enjoy the presumption of reliability for the different services. EU Trust mark.



#### The trust: cornerstone of the European Union regulation

How to transform a feeling (trust) in a legal and technical reality?

**TRUST** 



- Reliability (qualification)
- Guarantees & responsability
- Security (qualification)

Trust list of QTSP & EU Trust mark for Q services



## Other services

### Other trust services not adressed by the UE Regulation:

- Electronic archives (but not the « preservation of E-Signature and E-seal »)
- Management of Evidence
- Encryption
- Identity and Acces Management (IAM)
- **Etc...**



## I. Introduction

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## **Authentication and digital identification**

- Authentication of Websites: two security levels for the electronic certificates provided by the Trust services providers
- The purpose is fight against phishing
- Requirements for qualified certificates for website authentication
  - see. Annex IV of EiDAS



## **The different Trust Services**

- Electronic Signatures and certificates
- Electronic Seals and certificates
- Time Stamping
- Electronic registred delivery Service
- Electronic document
- Authentication of website



















## **Electronic signature**

#### EU Regulation (art. 25 and seq.)



- The qualified electronic signature **shall have the same legal effect as the handwritten signature** and must be mutually recognised and accepted in the Member States
- No discrimination of the non qualified electronic signatures
- Certification of the qualified electronic signature creation devices
- Characteristics of the <u>electronic signature in the public sector</u>
- Integration of validation and preservation services of qualified electronic signatures
- Integration of <u>remote electronic signatures</u> (archived remotely) (recital 52)

Contrary to the article 1316-4, § 1 of the french civ. c., the regulation as well as the directive n° 1999/93, do not provide that the electronic signature is expressly guaranteeing the consent of the signatory to the legal content of the signed act





## **Electronic signature**

• <u>Definition</u>:.



« I SIGN »

- Identification of the signatory
- Expression of the consent
- Reliability of the process



## **Electronic Signature**





#### 3 levels of signature (idem France):

- **Electronic Signature « simple » :** « means data in electronic form which is attached to or logically associated with other data in electronic form and which is used by the signatory to sign (art. 3-10) » (To sign : what is that means ?)
- **« Advanced Electronic Signature » :** «means a electronic signature which meets the requirements set out in art. 26 » (4 conditions, see next slide)
- **« Qualified electronic Signature » :** « means an advanced electronic signature that is created by a qualified electronic signature creation device, and which is based on a certificate for electronic signature»
- (the same as in the french legal framework: a secured electronic signature, that enjoy the presumption of reliability of the art. 1316-4 of the french civ. c. & articles 1 et 2 of the decree of 30 march 2001)





#### A reliable « electronic signature » requires :

- Either to prove to the judge seized of the case that the **process used** (whatever it may be) guarantees the identification and integrity of the act including over time
- Or to benefit from a **presumption of reliability** (which turns the burden of proof) by using (art. 1316-4 Al. 2 of the civil Code and decree of March 30 th 2001):

A "simple" electronic signature

A "Advanced" electronic signature

A data which results of the use of a reliable process of identification guaranteeing its link to the related act

- + attributed to the signatory (uniquely linked to signatory and identifying him)
- + use under the sole control of the signatory
- + guaranteeing a link in such a way that any subsequent change of the act is detectable (*Integrity*)
- + secured electronic signature creation device
- + use of a qualified electronic certificate

« Qualified Electronic Signature » = presumption (rebuttable) of reliability and equivalent legal effect of a handwritten signature





#### Limits of the electronic signature

- The technical principle of « non repudiation » of the electronic signature does not match with any legal reality.
- Exemple in french law: Articles 287 seq. of the civil procedure Code, the judge could:
  - verify if the conditions of the validity of the writing or of the electronic signature,
     under the articles 1316-1 and 1316-4 of the civil code, are met
  - or, as the case may be, rebut the presumption of reliability, if the elements of the case are justifying this rebuttal
- The procedures of generation and preservation of the electronic signature are thus essential for establishing the reliability of the process before the judge.





## **Practical example:**

#### Magistrate's court (TI) Epinal, December 12th 2011

- Decision TI: the document « file proof of the transaction » alone is insufficient to ensure the
  undertaking of M. X since there is no evidence of the supposed electronic signature that enables
  to link the non-signed loan offer with the document provided, in this case a simple printed filed,
  with no guarantee of authenticity, and no justification of the security process that was used »
- ⇒ The right of action is extinguished because the electronic amendment, which could initiate a time limit, is not taken into account by the court.

#### **Court of Appeal (CA) Nancy, February 14th 2013**

- Appeal of the decision of TI Epinal dated December 12th 2011
  - The file of proof of the transaction, provided to the court, was issued by the certification authority
  - Proof before the court of the functioning/Certification of the certification authority
  - « the mention of the number of the amendment on the file of proof enables to verify that
    this amendment is the one that was electronically signed by Mister X ».
  - ⇒ The Bank's action for the payment by Mr X is not extinguished.





## **Sealing**



- **Electronic seals that** « should serve as evidence that an electronic document was issued by a legal person, ensuring certainty of the document's origin and integrity ».
- ❖ Necessary intervention of a natural person that person creates the electronic seal.
- Three security levels: elementary, advanced, qualified electronic seal (the latter benefits from the presumption of reliability and is the one that is mutually recognised and accepted)
- ❖ → RGS (France): the function « Signature » covers the case of the signature made by a person, while a signature is made by a server (ex : signature of an acknowledgement of receipt) constitutes the function « Seal ».





#### Seal

- Server certificate (technical signature // « legal » signature): « signature » of the legal person, authentication and integrity functions, no consent/will
- Question about the intervention of a natural person (or legal) in the process of sealing
- Ex.: Digitalisation of invoices: Art.289 of the french general tax Code
- or pay slip (art.L.3243-2 and seq. of the french labour Code)
- or offer of contract by a bank or a insurance company.





## Time stamp



- Two security levels: simple or qualified time stamp.
- Simple time stamp: « data in electronic form which binds other data in electronic form to a particular time establishing evidence that the latter data existed at that time »
- Qualified time stamp :
- exactly bound to the Coordinated Universal Time (CUT) in such a manner to preclude any possibility of the data being changed undetectably
- based on a accurate time source
- delivered by a qualified trust services provider
- signed using an advanced electronic signature or sealed with an advanced electronic seal of the **qualified** trust service provider, or by some equivalent method.





## Time stamp

- Art. 1369-7 of the civil Code: « the shipping of the date results from an electronic process whose reliability is presumed, until proved otherwise, on the condition that it complies to the requirements of the decree by the Conseil d'Etat (Council of State) ».
- ❖ RGS: Type time stamp Policy in order to secure information systems under the responsibility of an administrative authority with a time stamp function, which must use the time stamp tokens delivered by the electronic time stamp services providers in accordance with the Type time stamp Policy.





## Time stamp

\* Two security levels: reliable time stamp process (art. 2 Decree 2011-434) or not:

In order to benefit from a presumption of reliability, the process must be established by an electronic time stamp services provider complying with the requirements of the art. 3 and the time stamping module must be certified in accordance with the requirements of the decree.





## Electronic registered delivery service

- Two security levels: simple or qualified electronic registered delivery service.
- Electronic registered delivery service: « a service that makes it possible to transmit data between third parties by electronic means and provides evidence relating to the handling of the transmitted data, including proof of sending and receiving the data, and that protects transmitted data against the risk of loss, theft, damage or any unauthorised alterations »
- Qualified electronic registered delivery service:
- One or more qualified trust service provider(s)
- That ensure(s) with a high level of confidence the identification of the sender and **ensure(s)** the identification of the addressee before the delivery of the data
- The sending and receiving of data is secured by an advanced electronic signature or an advanced electronic seal of a qualified trust service provider
- Any change of the data is clearly indicated to the sender and addressee of the data
- The date and time of sending, receiving and any change of data are indicated by a qualified electronic time stamp





## Registered delivery service

- ❖ Electronic registered letter: article 1369-8 of the civil Code and its implementing decree: the decree n°2011-144 of February 2<sup>nd</sup> 2011 of the sending of a registered letter by means of electronic mail for the for the conclusion or the performance of a contract.
- Order n° 2014-1330 of November 6th 2014 relating to the right for users to call upon the administration by electronic means





#### **Electronic documents**

- Art. 46: An electronic document shall not be denied legal effect and admissibility as evidence in legal proceedings solely on the grounds that it is in electronic form
- → Recall of the media non-discrimination principle (see Uncitral model law 1996 and EU Directive 1999/93) This principle of non-discrimination is also applied to the non qualified trust services (ES, seal, time stamp, ...)





#### **Electronic documents**

- In the french civil law: distinction original v./ copy
- Original: « Unlike a copy, [an original is] a written instrument, in one or multiple original copies, that determines a legal act signed by the parties (or by the representative) » (Cornu).
- Original in electronic form: « Concerning the contracts in electronic form, the requirement of multiple originals is deemed as fulfilled if the act is established and preserved in accordance with articles 1316-1 and 1316-4 and if the process enables each party to have an original or to access to it » (art. 1325, al. 5 of the civil Code).





Do you have any questions?







## Thank you for your attention!

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