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Lawyer's perspective on digital signatures in Europe

Introduction

In many countries around the world laws on electronic or digital signatures have been emanated, since in 1996 Utah emanated the first ever Digital Signature Act.[1] A year later Germany made first European Law on electronic signatures,[2] and also Italy.[3] The scope of these laws was to facilitate electronic commerce, to make contracts concluded by electronic means legally valid, even when there is a written form requested. It was necessary to be able to authenticate data electronically. So there was an impact of lawyers that had to confront themselves with technology and to regulate it.[4]

In this paper we are going to concentrate on the state in Europe, because, in the USA, although there in Uniform Electronic Transaction Act,[5] there is a great variety of solutions regulating electronic and/or digital signature.[6]

1. Distinction between electronic and digital signature

Electronic signature and digital signature are not synonyms, although the distinction isn't quite clear. "Electronic signature" means an electronic sound, symbol, or process attached to or logically associated with a record and executed or adopted by a person with the intent to sign the record,[7] or simply data in electronic form which are attached or logically associated to other electronic data that serve as a method of authentication.[8] That means it could be a scanned handwritten signature inserted in a document, data of a header of an e-mail that says from whom it is, name added in the end of a document etc.

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[1] Utah Digital Signature Act, (Utah Code Ann. § 46-3-101 et seq.).
[2] Signatur Gesetz vom 22. Juli 1997 (BGBl. I S. 1870, 1872).
[3] Decreto del Presidente della Repubblica 10 novembre 1997, n. 513, Regolamento recante criteri e modalità per la formazione, l'archiviazione e la trasmissione di documenti con strumenti informatici e telematici, a norma dell'articolo 15, comma 2, della legge 15 marzo 1997, n. 59, u: Gazzetta Ufficiale 13. 3. 1998, n. 60.
[4] Baker, A. Stewart, Paul R. Hurst, Limits of Trust, Cryptography, Governments, and Electronic Commerce, Kluwer Law International, The Hague, London, Boston, 1998., p. 1.
[5] Uniform Electronic Transaction Act, 1999., Drafted by the National Conference of Commissioners on Uniform State Laws, at Annual Conference Meeting in its 108 Year, Denver, Colorado, July 23-20, 1999, <http:// www.law.upenn.edu/bll/ulc/fnact99/1990s/ueta99.htm>.
[6] http://www.mbc.com
[7] UETA, Section 2. Definitions, point (8).
[8] Directive 1999/93/EC of the European Parliament and the Council of 13 December 1999 on a Community Framework for Electronic Signatures, Art. 2. Comma 1.

Generally (in legal doctrine) digital signature is a precise type of electronic signature that uses digital technology for its generation. It is also called "advanced electronic signature".[9] Electronic signature can be any thing that can connect a document to its author, while digital signature should guarantee also the integrity of the electronic document.

2. European Union Directives

EU brought up its Directive on electronic signatures (1999/93/EC) and Directive on e-commerce (2000/31/EC), with which it forced all member states and the states that are trying to be a part of EU to emanate laws on electronic signatures and e-commerce.

With intention to support the ideas of free market and avoiding the monopoly, the Directive on electronic signature is technologically neutral.[10] That means that advanced electronic signature is defined by what goals it should meet, but it lacks a precise definition. "Advanced electronic signature" should meet the following requirements: (a) it is uniquely linked to the signatory; (b) it is capable of identifying the signatory; (c) it is created using means that the signatory can maintain under his sole control; and (d) it is linked to the data to which it relates in such a manner that any subsequent change of the data is detectable.[11] It has been justified by the quick development of informatics technology, and in the European Union Directive it should be defined that way. But there is no strict definition of invalidity of other electronic signatures. Advanced electronic signature is presumed to be valid, and in all EU member states should be equivalent of handwritten signature on a paper based document.[12] Although in the next comma of the same article it says that an electronic signature is not denied legal effectiveness and admissibility as evidence in legal proceedings solely on the grounds that it is: in electronic form, or not based upon a qualified certificate, or not based upon a qualified certificate issued by an accredited certification-service-provider, or not created by a secure signature-creation device.[13] That creates the state of legal uncertainty. In Italy a there is still pending a case where a bank considers an e-mail massage valid form of electronic signature, based on the fact that to have access to an e-mail account it is necessary to input correct username and password, that should satisfy the request for a valid electronic signature. The other part in the case considers that it is not a valid statement, because the signature is not valid.[14] Although in one way, considering the fact that it is truth that e-mail account is accessed with username and password, the fact is that the programs used to read and create e-mail massages have persons username and password stored and quite often to protect your e-mail you should protect the access to your computer. And there is an other problem with e-mail addresses, that there are e-mail

[9] Directive 1999/93/EC, Art. 2. comma 2.
[10] Directive 1999/93/EC, Preamble, point 5.
[11] Directive 1999/93/EC, Art. 2. comma 2.
[12] Directive 1999/93/EC, Art. 5. comma 1.
[13] Directive 1999/93/EC, Art. 5. comma 2.
[14] See: Il testo del ricorso al tribunale di Cuneo <http://www.interlex.it/docdigit/ricorsocuneo.htm>.

accounts that do not run a thorough check up of account owner identities. That should create second graded e-mail addresses for electronic signature.[15]

The problem is also that the national legislation of the member states that adopted such definitions, and haven't provided a more precise request to meet.

3. Applicability of electronic signature

The idea of electronic signature seemed to be great to support e-commerce, but there has been a rather law application in civil law.

EU doesn't have the competence to force member states to change their Civil codes, Directives on electronic commerce and electronic signatures expressly say that they don't regulate the law on validity of the contract or the law that regulates where the contract has been signed.[16] But not everywhere the necessary modifications in the contract law have been made. For example the definition of signature in French Code Civil has been changed from "putting the signature with your own hand" in "putting the signature personally".[17] German Bürgerliches Gesetzbuch has introduced the definition that wherever written form is requested by the law it can be satisfied by a document in valid electronic form defined by the Law on electronic signatures, except when otherwise is requested.[18] Croatia hasn't made any of such changes.

3.1. Inadmissibility of electronic form for some contracts

There has been also opened a wide door to make wide exceptions for application of electronic documents for some types of contract, by the Directive on E-Commerce. The member states have the he possibility to exclude the possibility for some types of contracts to be validly concluded in electronic form, such as: (a) contracts that create or transfer rights in real estate, except for rental rights; (b) contracts requiring by law the involvement of courts, public authorities or professions exercising public authority; (c) contracts of suretyship granted and on collateral securities furnished by persons acting for purposes outside their trade, business or profession; (d) contracts governed by family law or by the law of succession.[19] Although, Member States shall indicate to the Commission the categories excluded from the possibility of applying electronic form and they shall submit to the Commission every five years a report on that explaining the reasons why

[15] E.g.: anyone can have a yahoo e-mail address with any free name, it is based on the rule „firs come – first served" and it doesn't give you any guarantee that the person who uses the account JohnSmith@yahoo.com is really John Smith. And there are other ISP-s that in one way or other check identity of their users.

[16] Mullerat, R.: Elektronski mediji i pravo, Odvjetnik, n. 3-4, 2000., p. 31-32.

[17] Art. 1326., *Code civil*, Éditions Dalloz, Paris, 1997., and *Loi n^o 2000-230 du 13 mars 2000 portant adaption du droit de la preuve aux tehnologies de l'information et relative à la signature électronique (JO n^o 62 du 14 mars 2000, p. 3968)*, Art. 5, by which the expression "*de sa main*" in the Article 1326. of *Code civile* is changed in "*par lui–même*".

[18] § 126a Comma 1. BGB

[19] Directive 2000/31/EC, Art. 9. Comma 2.

they consider it necessary to maintain the category to which they do not apply the validity of electronic contracting.[20]

In Germany in 2001 the Law on modification of norms on legal form and other norms on civil law in according to the new legal business communication[21] was made. It made equivalent electronic form in according to the Law on electronic signatures[22] with written form, if nothing else was prescribed. It also made five exceptions of that rule; so it is not valid to conclude in electronic form for the breach of work contract (§ 623 BGB), to make a certificate of state of work (§ 630. BGB), contract of suretyship (§ 766. BGB), the declaration of promise to do something (§ 780. BGB), admission of debt (§781. BGB)[23] and conclusion of the contract on consumer credit.[24]

Croatia with Article 6 comma 2 of the Croatian Law on Electronic Signature (Narodne novine, 10/02) has wide limitations for almost all types of contract that requires written form. So, in Croatia the contract can't be stipulated in electronic form if: with it is transferred property of an immobile or is created a right on immobile; succession legal acts; prenuptial or nuptial agreements; all acts that requires social services consent; succession contracts stipulated during life; contracts on life long maintenance; gift contracts; all other legal acts that should be as notary act; all other legal acts that other law or sub law regulations requires handwritten signature or notary confirmation of signature.

The list is quite long and even in some cases unnecessary (e.g. for gifts: that are either an real contract or they should be as a notary act, or in case of gift of immobile it is included in the firs point). It seams that someone just tried to include anything possible in it.

It is questionable the exclusion of notary acts, there is no reason why they shouldn't be in electronic form. Commercial societies acts are supposed to be public (published) and are very often notary acts. Croatia has the Court registry on the web,[25] and there is the duty for the court administrators to type the summery of all acts deposited in the court registry. In Italy there has been stipulated a contract between the Notary chamber and the Chamber of commerce (that handles the registry of the firms) that regulates the procedure of depositing acts in electronic form in the registry. [26] That way, the procedure has been fastened that is very important for business. In Croatia and in Slovenia it is not possible because, it is not legally valid to sign a notary act in electronic form. From my point of view there is no reason why the electronic signature should be

[20] Directive 2000/31/EC, Art. 9. Comma 3.

[21] Gesetz zur Anpassung der Formvorschriften des Privatrechts und anderer Vorschriften an den modernen Rechtsgeschäftsverkehr, BGBl, n. 35/2001.

[22] Gesetz über Rahmenbedingungen für elektronische Signaturen und zur Änderung weiterer Vorschriften, Bundesgesetzblatt, 2002., Teil I. nr. 22, 21. 5. 2001.

[23] Vidi: Geis, I.: Das neue Signaturgesetz: Die deutsche Sicherheitsordnung für den E-Commerce, <http://www.ivo-geis.de/documents/neuessigg.php3>, str. 3.

[24] § 4. st. 1. *Das Verbraucherkreditgesetz* (29. 6. 2000., BGBl. I S. 940.).

[25] http://sudreg.pravosudje.hr/

[26] Consiglio Nazionale del notariato: Collaborazione tra Consiglio Nazionale del notariato e Camere di commercio, comunicato stampa, Milano, 10 ottobre 2002. <http://www.interlex.it/segnal/notai.htm>.

forbidden for the notary, because it is much easier to make a forgery of a paper based notary act then to make falsification of a notary digital signature.

3.2. Other limits for applying of electronic contracts

But there are some other limits for application of electronic documents. For example in Italy electronic form suits for almost all contracts that should be in written form, but, the majority of those contracts should be registered by government bodies, and for that is necessary to put tax stamps on the document, and on electronic document it is still impossible. So you have a legally valid contract, but you have problems to register it, so attorneys recommend their clients to sign in classic form.[27] Similar situation is possible by Croatian law in case you have a contract of sale of mobile goods that is submitted to registrations by government bodies (e.g. cars, boats…). So you have a valid sale, but with electronic contract you should request form seller to sign you a valid paper – written document that you need to register your new goods. You should obtain it in a court procedure, but it complicates things, so from the practical point of view you make your contract immediately on paper.

There is an example where an attorney made experiments with MS word, and it is really from the legal point of view irregular. If you put in a document (mostly in header or footer) the option to print date, or author, it changes when you change the computer (as it sometimes happens with the normal font if it is different from computer to computer, but it is irrelevant for layers, except the fact that notary acts have to be in courier 10 pt), and PGP doesn't notice that the document has been modified (because it hasn't been, but the print is different on different computers, and that doesn't bring certainty from the legal point of view).[28]

4. Conclusion

The electronic signature has been applied in administrative law mostly for internal administrative acts. That is a good begging for widening of its application. That way the clerks are forced to use digital signature, and to learn how to use it, and there should be less risks when they are going to use it even for external acts, with more legal importance.

I firmly sustain that electronic signature is going to have its future, and all the barriers existing now are slowly going to fall, but the legislation has to leave the door opened at least a bit, that's not the case in Croatia. The first to start using it (in a legally valid way) should be the government bodies, and similar organs (e.g. notary), and than when it gets proofed and confirmed in courts of law, commercial subjects are going to start to use it.

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[27] Brescia, S.: In tema di firma digitale e di documento informatico (d.p.r. 10 novembre 1997, 513), Le nuove leggi civili commentate, anno XXIII, n. 1-2, gennaio-aprile 2000, str. 19.-20.

[28] Gelpi, Andrea: La firma è sicura, il documento no, InterLex, 19. 9. 2002., <www.interlex.it/_util/print.asp>

Education is very important, because without knowing what an electronic signature is, you get it applied on paper based documents, in the way that there is a statement on the bill received by regular mail (non e-mail) that says: “This bill hasn’t been signed based on the Law on electronic signatures, because it has been signed on the computer.” This bill is not legally valid, and it is possible to get an interpretation in newspaper that it is not legally valid to sign electronically bills, and that is going to be a real negative publicity for e-signatures.