

# THE ELECTRONIC SIGNATURE. ITS VALORIZATION AS A EVIDENTIARY MEANS IN NATIONAL OR INTERNATIONAL PENDING CASES JUDGED IN COURTS

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## Abstract

*In the European Union states, there is a variety of legal norms regulating the electronic signature, fact which led to the initiative of the European Commission to harmonize the incidental dispositions in the legislation of the member states to eliminate all the legislative discrepancies.*

*For the legal operations which take place in the virtual space, they raised the issue of confirming the agreements according to the allegations made in the respective documents, the signature authenticity being questioned for lack of well established rules and without a corresponding protection which could eliminate the possibility of altering it.*

*Unlike the traditional writs, the electronic writs do not have a strictly visual representation. As a result, it is imperative that the recipient should verify, using specific methods, the conformity of the signature, respectively the document authenticity.*

**Keywords: Electronic signature, electronic writs, document authenticity, holograph signature, certification services, private key.**

## Contents

The multitude of commercial national or international transactions could not be performed today with so much efficiency without the support of the informational and technical means, without the electronic signature, which might confirm the partners 'agreement, which might enable them to certify the conventions concluded even if they are not present and the negotiations are also made through electronic means.

The operations in the area of the public services which take place today in the virtual space, raised the issue of establishing a system which might be used, with the same elements of security as the signature and the writs made on the writing paper as a writing support, by the one who writes or signs being present at the place where these operations take place.

The unprecedented progress of the informational system could not help influencing the evidentiary system<sup>2</sup>, by using some new opportunities and possibilities of evidence, for

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<sup>2</sup> For further details regarding the evidentiary system in the cases filed in courts, in national or international litigations, also see: A. Ionașcu, Probele în procesul civil, the Scientific Publishing House, Bucharest, 1969; E. Mihuleac, Sistemul probator în procesul civil, Academy's Publishing House, Bucharest, 1970; FL. Măgureanu, Înscrierile – mijloace de probă în procesul civil, Lumina Lex Publishing House, Bucharest,

supporting the allegations made by the parties when there are conflicts which cannot be solved amiably and the partners are forced to prove the allegations made in court or the arbitrage institutions.

It is obvious the practical utility of drawing the reconstituted writs, of the fact that these reflect to a great extent the truth being made before the emergence of the conflict between the subjects of the legal relation under judgment.

According to the traditional norms, the writ under private signature does not require a special form, in exchange, the signature of the party who signs should be holograph, not being able to be typed or lithographic or replaced by a stamp or seal etc.

On the communitarian level, there is a variety of legal norms regulating the electronic signature, fact which led to the initiative of the European Commission to harmonize the incidental dispositions in the legislation of the member states to eliminate all the legislative<sup>3</sup> discrepancies. Within this context, the European Parliament and the Council of Ministers adopted, on the 13<sup>th</sup> December 1999, Directive no. 1999/93/CE regarding the communitarian framework for the electronic signature<sup>4</sup>.

In order to ensure the legal acknowledgement of the electronic signature and of its certification services, as well as the assimilation of the electronic signature to the holograph signature, the Directive has in view the creation of a harmonized legal framework for using the electronic signatures within the European Community, the guarantee of a good functioning of the domestic market in the area of the respective signatures, also establishing the criteria underlying its acknowledgement.

A basic element of the holograph writ used as an evidentiary means is the signature, the proof of its authenticity, the warranty that is belongs to the person who declares that the written statements belong to him, on condition that it is not altered, in any way, through radiation, duplication, annexation, imitation and similar procedures.

Unlike the traditional writs, the electronic writs do not have a strictly visual representation except when the recipient verifies, using the specific means, the conformity of the signature, respectively its authenticity, the integrity and confidentiality of the document content as well as the identity of the signee. A great advantage it provides is the fact that the digital support (diskette, CD, etc.), is much more long-lasing than the paper, the accountancy and the archiving possibilities are obviously superior and the electronic language has become universal, eliminating the difficulties of speech, translation, interpretation, different legal regulation.

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1997, p. 10 and the next; D.C. Tudorache, Sistemul probator în procesul civil, Ankarom Publishing House, Iași, 1996.

<sup>3</sup> See, the Proposal of the European Commission regarding a communitarian framework for the electronic signatures, published in the Official Journal of the European Communities, series C, no. 325 of 23<sup>rd</sup> October 1998, p. 5-12.

<sup>4</sup> The Directive was published in the Official Journal the European Communities, series L, no. 13 of 19<sup>th</sup> January 2000, p. 12-20.

According to the provisions of the art. 4 point 3 of Law no. 455/2001<sup>5</sup> „the electronic signature represents electronic data, to which they are attached or logically associated other electronic data and which serve as an identification method”.

The above-mentioned law also regulated the „extended electronic signature” which represents that electronic signature which cumulatively meets the following terms:

- a) It is uniquely related to the signee;
- b) It ensures the signee’s identification;
- c) It is created through means exclusively controlled by the signee;
- d) It is related to the electronic data, to which it is reported so as that any subsequent modification of these data is identifiable.

The creation data of the electronic signature represents, according to the regulation provided by the law, any electronic data with the characteristic of uniqueness, such as private codes or cryptographic keys, used by the signee to create an electronic signature (art. 4 point 6).

The Law also defined the signee, represented by a person who is provided with a device for creating the electronic signature and who acts on his behalf, either as a representative of a third party, the device for creating the electronic signature representing a configured software and/or hardware, used for implementing the data for creating the electronic signature.

The main objective of the law mentioned above is the identification and certification of the consent of the writ author under electronic form and meeting all the requirements of fidelity and the security system based on the electronic signature.

The security devices to create and verify the signature should be accompanied by a valid certificate from the provider of the certification services, the absence of this certificate leading to the impossibility of assimilating the electronic writ with the writ under private signature (art. 5 of the law).

Art. 4 point 8 of Law no. 455/2001 provides the terms which are to be met by the security device (configured hardware and/or software) for implementing the creation data of the electronic signature, respectively:

- a) The creation data of the signature, used for it to be produced, so that it may appear only once and its confidentiality could be kept;
- b) The creation data of the signature, used for it to be produced, so that they may not be deduced;
- c) The signature should be protected against its forgery through the available technical means at the moment it is produced;

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<sup>5</sup> Law no. 455/2001 regarding the electronic signature was published in the Romania’s Official Journal, Part I, no. 429 of 31st July 2001. The technical and methodological norms for applying Law no. 455/2001 were published in the Romania’s Official Journal, Part I, no. 847 of 28th December 2001. Also see Law no. 451/2004 regarding the temporal mark, published in the Official Journal, Part I no. 1021 of 05th November 2004.

**d)** The creation data of the signature should be effectively protected by the signee against it being used by unauthorized persons;

**e)** They should not modify the electronic data, which have to be signed, and neither should they prevent them from being presented to the signee before the signing process is over;

On the basis of the law, the verification data of the electronic signature represent electronic data, such as public codes or cryptographic keys, which are used to verify the electronic signature.

In order to establish the identity of the person which the electronic signature belongs to, a certificate is necessary, a certificate which represents a collection of electronic data certifying the connection between the verification data of the electronic signature and a person, confirming the identity of that person and which is issued by a certification service. According to the law, the provider of the certification services may be any person, Romanian or foreign person, who is entitled to issue certificates or who also provides other services related with the electronic signature, this person having to keep the secret of the trusted information (art. 15 of the law)<sup>6</sup>.

As a result, the creation mechanism for the electronic signature consists in applying a „hash-code” function, thus obtaining the document print and applying a private key over the respective, „the private key” being a unique digital code, created through specialized hardware and/or software devices.

The certificate represents a collection of electronic data certifying the connection between the verification data of the electronic signature and a person, confirming the identity of that person (art. 4 point 11 of the law) and which should contain the following technical elements:

**a)** Indicating the fact that the fact that the certificate was issued as a qualified certificate;

**b)** The identification data of the certification service provider, as well as his citizenship, in the case of natural persons, respectively his nationality, in the case of legal persons;

**c)** The name of the signee or his pseudonym, identified as such, as well as other attributes specific to the signee, if relevant, depending on the reason why the qualified certificate was issued;

**d)** The personal identification code of the signee;

**e)** The verification data of the signature, which correspond to the creation data of the signature under the exclusive control of the signee;

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<sup>6</sup> Also see Law no. 506/2004 regarding the processing of the private data and the protection of private life in the sector of the electronic communications, published in the Official Journal, Part I no. 1101 of 25th November 2004, modified, as well by Law no. 298/2008, published in the Official Journal, Part I, no. 780 of 21 November 2008. Also see Law no. 677/2001 for the protection of persons regarding the processing of personal data and the free circulation of these data, published in the Romania's Official Journal, Part I no. 790 of 12th December 2001, modified, as well by the Emergency Ordinance no. 36-2007, published in the Official Journal, Part I no. 335 of 17 May 2007.

- f) Indicating the beginning and the end of the validity period for the qualified certificate;
- g) The identification code of the qualified certificate;
- h) The extended electronic signature of the certification service provider who issues the qualified certificate;
- i) If necessary, the limits for using the qualified certificate or the value limits of the operations for which it can be used;
- j) Any other information established by the regulating and supervising specialized authority (art. 18 of the law).

In order to ensure the unique identity, each signee will be given a personal code by the certification service provider.

In the field legal literature they considered that although the law starts from the principle according to which the holder of the private key is the author of the electronic writ, who may consider himself that he does grant, by confirming the validity of the extended electronic signature, value to the absolute presumption on the identity of the signee<sup>7</sup>, a third party holding the „private key”, being able to sign the electronic message on behalf of its legitimate holder. Thus, they concluded that a trustee<sup>8</sup> can sign, to the extent of the mandate entrusted, on behalf of the „private key” holder.

They have tried hard and we consider that, to a large extent, they have succeeded that the identity of the person may be included in a digital certificate, a secured electronic code, which may be certified only the person holder of the decoding key and who may provide sufficient secured elements, who may ensure the certification of the message origin, its integrity and its confidentiality.

According to the general principle according to which the value of the evidentiary means should be for the court to freely decide on<sup>9</sup>, the electronic signature does not have a pre-established value either, there is the possibility of using without a right the „private key”, whether by the certification service provider or by other persons who can illegally enter in its possession. In order to prevent forgery and grant the electronic signature a high value, according to the provisions of the art. 23 letter d) of the Methodological norms, the signee

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<sup>7</sup> T.G. Sava, *Consacrarea legală a semnăturii electronice*, Magazine of Commercial Law, no. 7-8/2002, p. 226-230.

<sup>8</sup> For the terms necessary to the representation by proxy of a person at the conclusion of legal documents, see G. Măgureanu, *Drept. Curs pentru Facultatea de Economia Turismului Intern și Internațional*, Universul Juridic Publishing House, Bucharest, 2009, p. 236 and the next.

<sup>9</sup> For a more detailed study on how to solve litigations in courts, the admissibility and the administration of evidence, see: I. Stoenescu, S. Zilberstein, *Drept procesual civil. Teoria generală*, E.D.P., Bucharest, 1983, p. 454 and the next; V.M. Ciobanu, *Tratat teoretic și practic de procedură civilă*, vol. II, Național Publishing House, Bucharest, 1997, p. 7 and the next; I. Leș, *Tratat de Drept procesual civil*, the 4th edition, C.H.Beck Publishing House, Bucharest, 2008, p. 413 and the next; I. Deleanu, *Tratat de procedură civilă*, vol. II, Europa Nova Publishing House, Bucharest, 1997, p. 5 and the next; A. Hilsenrad, I. Stoenescu, *Procesul civil în R.P.R.*, the Scientific Publishing House, Bucharest, 1957, p. 283 and the next; I. Stoenescu, Gr. Porumb, *Drept procesual civil român*, E.D.P., Bucharest, 1966, p. 237 and the next; Fl. Măgureanu, *Drept procesual civil*, the 12th edition, Universul Juridic Publishing House, Bucharest, 2010, p. 277 and the next; M. Tăbărcă, *Drept procesual civil*, Vol. I, Glogal Lex Publishing House, Bucharest, 2004, p. 284 and the next.

has to protect the „private key” from thefts, damage, modifications of its contents or its compromise.

Until the entrance into force of the law on the electronic signature, in the field legal literature they stated, for a good reason, that the electronic records may be considered the beginning of written evidence, being able to be used as a means of evidence only by corroborating them with other evidentiary means, s they do not contain the original signature of the issuer<sup>10</sup>.

The electronic signature, attached to the electronic writ to which it was incorporated or associated an electronic signature, unless it is an extended electronic signature or it is based on a qualified certificate or it is performed by means of a secured signature producing mechanism, can be assimilated, concerning its terms and effects, with the beginning of the written evidence (art. 5 of the Law no. 455/2001) and it can be completed with other evidentiary means to prove the respective legal relations.

According the provisions of the art.6 of the law regarding the electronic signature, „the electronic writ, to which it was incorporated, attached or logically associated an electronic signature, acknowledged by the one he is opposed to, has the same effect as the authentic document<sup>11</sup> between the persons who subscribed it and the persons who represent their rights”, and if according to the law, the written form is required as a condition of evidence or validity of a legal document, an electronic writ meets the same requirement if it was incorporated, attached or logically associated to an extended electronic signature, based on a qualified certificate and produced by a secured signature creating device.

Including the electronic writ among the other evidentiary means, does not automatically lead to the assimilation of the two categories of signature – holograph and electronic – the electronic signature is to produce its effects only when this provides sufficient warranties to certify the integrity of the message sent and the consent of its author.

In conclusion, we can state that the issue regarding the electronic signature is not whether or not it can be received as an evidentiary means in the civil or criminal case, it establishes the legal framework, so it cannot be contested by the one it opposes, so it be used in a form which may enable its automatic reading and processing by the interested subjects.

Although we also had an opinion, according to which the writs and the constitute the beginning of the written evidence, estimating that, as „the Law of civil procedure does not offer a legal framework for these evidentiary (electronic) means, the judge is to value them cautiously<sup>12</sup>, today, under the terms of Law no. 455/2001, of the international regulations on the legal practice, we consider that if the electronic signature fulfills the

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<sup>10</sup> See in this respect St. D. Cărpenu, *Drept comercial român*, the 2nd edition, ALL-BECK Publishing House, Bucharest, 2000, p. 377.

<sup>11</sup> Regarding the terms of the authentic document, see G. Măgureanu, the quoted work, p. 166 and the next.

<sup>12</sup> See: Fl. Măgureanu, *Înscrierile mijloace de probă în procesul civil*, 2nd edition, ALL-BECK Publishing House, Bucharest, 1998, p. 147

security requirements, it can be assimilated to the holograph signature and, as a result, the acknowledgement of a similar evidentiary force.

It is also imperative that the completion of the legal and technical norms necessary for the good functioning of the whole system regarding the electronic signature and for ensuring the security of the information to avoid forgery and to foster trust of the judiciary system into this efficient technical means of evidence.

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