ELECTRONIC EVIDENCE CONCEPT AND ESSENCE IN CIVIL PROCEEDINGS IN LATVIA

Jurkeviča Tatjana,

Dr.iur., sworn solicitor, Docent at Baltic International Academy e-mail: advokatu.birojs@inbox.lv

Annotation. Growing interest of people to be involved in electronic information network raises the necessity for a series of procedural measures. The main role in this issue is dedicated to the growth of information types existing in electronic format and its legal aspects which need to establish a stable normative regulation. These problems in their turn create a question on the evidence value of information existing in electronic form. The question is particularly important in the cases when communication between the parties to a civil dispute is in electronic form. The aim of evidence proceedings in procedural regulation is to develop preconditions for the court to clarify the true conditions of the case. To achieve the aim an appropriate procedural form is necessary which would let the judge and other parties to the process insure as conveniently and effectively as possible to show and try true conditions of the case and to clear the necessary evidence to make information technologies serve the litigation purposes more effectively. The solutions to those questions are closely linked to the understanding of the electronic evidence essence, as well as to determine its place in the trial process.

Аннотация. Все возрастающая заинтересованность лиц в сети электронной информации, вызывает необходимость провести ряд процессуальных мероприятий. Ключевую роль в этом вопросе уделяется увеличивающимся видам информации, существующим в электронном формате и их правовым аспектам, которые требуют определенного самостоятельного нормативного регулирования. Эти проблемы, в свою очередь, поднимают вопрос о доказательственной силе информации, существующей в электронном виде. Особое значение этот факт приобретает в тех случаях, когда коммуникация между сторонами гражданско-правового спора осуществлялась в электронной форме. Задачей процессуального регулирования процедуры доказывания является создание предпосылок для суда в установлении истинных обстоятельств дела. Для реализации данной задачи необходима соответствующая процессуальная форма, которая позволит суду и другим участникам процесса, по возможности, удобнее и эффективнее, обеспечить, предоставить и проверить доказательства, необходимые для установления истинных обстоятельств дела, чтобы информационные технологии могли эффективно служить для целей судопроизводства. Решения данных вопросов тесно связаны с пониманием концепции электронного доказательства, а также с необходимостью определить его место в процессе доказывания.

Key words: evidence, electronic evidence, civil proceedings, evidence source.

The importance of the topic chosen for the article and its importance is linked to the fact that during the last decade information technologies radically changed information fixation and ways of its transmission. Active application of new information technologies affected not only social relation sphere, but also to a big extend state administration system. The increase of information and computer technology in the society enhanced not only changes in many law regulations, but also created completely new information legislative relations. This process influences also civil proceeding law. Within the frames of civil proceedings theory and practice the interest raised a question on the possibility to use modern information sources in the civil proceedings. However, Latvia Civil Proceedings Law [1] separately neither defines nor regulates evidence which is obtained and exists in electronic form. From laws and regulations which determine proceeding law in Latvia the most advanced is considered Criminal Proceeding Law [2] which was enforced on 1st October, 2005. There is the notion of electronic evidence in it and electronic evidence is regulated separately and independently. Civil Proceeding Law and Administrative Proceeding Law [3], in which evidence regulation is rather similar, do not contain special regulation concerning electronic evidence considering those a part of written evidence. This situation cannot be viewed as satisfactory.

Modern electronic information sources are information, computer and telecommunication technologies which are applied for both organizational aims (to provide information sphere functionality, for example, to provide information/data collection, processing, storage, circulation, search and transmission), and information and communication aims (computer networks, telecommunication networks and special and open systems, as well as data transmission channels, communication and information flow administration tools), which are in electronic (digital or analogue) forms.

Some authors believe that the term "information" better reflect the essence of evidence [4,87]. It is difficult to agree with this opinion, since the information structure features content aspect (contents) and its material reflection – form. By means of the term "information" in its general meaning the data on something, some notion, some event or anything, which is an object for some operations which have contextual interpretation can be understood. In this case under the term of operation one can understand perception, transmission, changes, storage and application. Information, unlike data, has its meaning. According to Information Publicity Law [5], information is message or message summary in any technically possible fixation, storage or transmission way. From the analysis above it can be concluded that not any information can serve the evidence function in the trial. Only such features as applicable content and the form determined by the law can deserve the trial evidence status. Thus, one cannot agree with M. Palcikovska opinion that in adversarial process the parties give information to the court - evidence and arguments, presenting one's own case view and the facts are tried giving the chance for the judge to evaluate this information critically through each party opinion, evidence and arguments [6].

Information has to reflect case circumstances. Evidence source determines where (from where) evidence tools can be obtained to try and evaluate the evidential information. So, evidence and its source are two different things. The features of the information source influence the character of the information it contains. In this case both information and its source are the things which reflect information essence. Thus, the terms "modern information source as evidence" and "modern electronic information tools" are not accepted directly as the trial evidence notion to be understood and defined due to the fact that in their tern they are torn from the information content aspect. The author's opinion is the term "electronic" in this example determines the form, but the term "evidence" – the source.

Definitely, a supportive reference to the point is that the main formation element of electronic evidence is electromagnetic signals in the system of data transmission which are connected with information submission on some object, process or event features (their spread characteristics or circumstances relations with a person) [7,368]. Uldis Mikelsons points, that electronic evidence initial form can be electromagnetic signals which appear when registering definite circumstances by means of technical equipment software processing [7,369]. In other words, the signals mentioned can have informative meaning only in connection with other information sources, a definite information system or the subject who is the information recipient.

It should be emphasized that computer technical equipment receive, summarize, store and process different types of signals, which immediately after processing period is treated as computer information, or information which is stored and exists in computer form. So, one cannot state that that is electronic information, as well as it is not enough to state that it is the information stored in electronic form. It can be in digital or analogue form, which still is different from the term "electronic form". What one gets from the signals becomes not an event (without a certain aim), but information only when it can be stated and viewed only in relation to a definite object, process or event. The authors do not often, when research the essence of electronic evidence, specify these important differences.

The term "electronic evidence" asks for special attention. The term "electronic evidence" was introduced into Latvia everyday life mainly due to European Council Convention on Cybercrimes [8], which also advised the member countries to enforce the norms in their national laws which determine application of electronic evidence. It is important to point that the convention mentioned points at *evidence in electronic form*, i.e. at evidence in electronic format not at electronic evidence. And this difference is essential to understand this type of evidence correctly.

Electronic equipment, especially electronic and computer system development created the necessity to discuss the issue on new evidence application in civil cases, and in judicial practice they have started to be referred to generally – electronic. We are used to refer to them as to electronic media, but the data stored on them – information [7, 367]. Additionally, none considers it necessary to understand the new evidence type, which is takes both from files and its nature from the file format. They are just simple called electronic evidence to differ them from other types of evidence. A very important point is not taken into account, that an electronic part of evidence are connected only with electronic tool – electronics – machines, which in their work use electrons, to be more precise – electricity. For example, electronic book is electronic equipment, which is meant to read files (book, magazine or newspaper), but not files, because files are not electric [9]. Evidence, if they are meant files (photo, video, audio or software code), which are reproduced or reflected by means of electronic equipment or tool (computer, screen, television, smart phone and so on), are only reproduced by means of those. Evidence which is called electronic, actually, can be divided into two groups: analogue and digital. In simple terms, these groups can be characterized as follows:

Analogue (evidence) is the information on facts, which is taken from analogues signals. Analogue signals are those which are formed due to a constant change of their condition. Those are determined at any moment. For example, human sight or hearing constantly captures eventually changing sight and hearing signals (analogue signals). Transmitting and capturing analogue signals noise, distortion and errors cannot be avoided. Digital (evidence) is the information on facts, which is taken from digital signals. Digital signals are formed by sharp changes of impulse value. Impulse existence corresponds the value one (1), its absence – zero (0). If the impulse becomes a little stronger, longer or shorter, the system anyway defines it as one. Zero is zero, even if in its place a slight, accidental signal appears. When transmitting a digital signal, errors and distortions are practically eliminated. Digital signals are mostly used in computer equipment.

Analogue evidence (signals) can be in their original form, but can be described (recorded, reflected) on paper and added to certified copy or to the original. Analogue signals, for example, recorded on a tape or a film can be transformed into paper form, which makes them easier to store and to show to other people. Analogue signals can be less precise than digital ones. For example, their media devices change with time, frequent and multiple applications (repeated viewing) can develop small defects (streaks). Informative part can also significantly suffer, small but important details can disappear, and even sometimes the information can become unreadable. However, digital evidence (signals) can be fully identical both in the copy and in the original. For example, if digital signal is transmitted from a mobile phone into a laser disk, which can be added

to the case materials, then this recording, despite the fact that it is identical to the original is considered a copy. For example, if an internet page is printed, then it means that a digital signal is turned into an analogue signal – in paper form, to become digital signal case physical evidence, which is obtained at a certain moment. Distortions can appear when using printer ink, due to insufficient printer resolution or other effects of printer quality performance indicators.

A digital signal is absolutely precise, whilst an analogue signal is approximate. A digital signal does not change with time, changes only signal media device. A digital signal cannot degrade under oxygen or sun ray (ultraviolet) influence, depending on the signal media – for example, on organic plastic optical disk. Digital evidence is not changed. The condition of digital signal carrier can change. For example, eventually the outer layer of polycarbonate in case of optical disc can degrade or some streaks and scratches can appear or it can break or be broken and becomes impossible to read. Thus, to ensure the safety of digital signal storage several copies on different signal carriers (optical, magnetic and so on) are made.

Thus, analogues and digital signal are different according to their nature and application, and it must be reflected in the term "electronic evidence" definition and in this evidence application approaches.

Due to the complex characteristics of information signals (both analogue and digital) used as evidence, a general term – electronic evidence is used which covers both signal types – digital and analogue, but which are reproduced by means of special electronic equipment. That is the reason why there has appeared so many terms with the word electronic (electronic document, electronic signature, and so on), which essentially cover a generalization of two types of evidence forms – analogue and digital. Equipment which can reproduce only a definite type of analogue or digital signals (player, tablet, cassette player, television and so on) increase has stimulated the necessity to define evidence terms, without mentioning the equipment use for its reproduction. Equipment is just a media between a signal and a person. To determine a signal, it is not important which media did it.

In practice there is a definite division of terms electronic and digital. As an example a famous program "Adobe Reader" can be used, which is meant for reading digital documents. Within the frames of this program there is a choice – digital signature. This option opens the module to encode digital signature (to authorize the content confidence or authentication). The term "electronic signature" is not used in this program at all. In the software of this module in "Adobe Reader" determines that this module contains exactly the thing which is in Latvia called as electronic signature and nothing else. And this is not an only example.

In everyday life when hearing the term "electronic text file", a person combines two terms "file" and "electronic", supposing that the file is electronic and not digital as it is in electronic equipment. Actually, file is an algorithm which determines the operations to be made by electronic equipment or it is the information which is produced by the file by means of algorithm. A file does not contain electrons and does not use electrons. Electrons are used by electronic equipment to fulfil the tasks according to a definite algorithm which is in a file (or in a different file) to achieve a definite result, for example, to reflect the text on the screen according to the data which are in the file (software). Files can be only in digital form.

From all the described above, it can be concluded that the information which is read electronically by a computer is "digital", not "electronic" since it is linked with the coding in digital form and connected to the file and cannot exist without it. Accordingly, a book (file) which is read by means of computer equipment "electronic book" or by means of other computer equipment has to be called "digital", but not "electronic". "Digital" in electronics and computer systems is a term which means "coded by digits", in the basis of which is all analogue signal (picture, sound or text) conversion into digital (usually binary) codes and their re-transformation at the perception time.

Thus, in judicial practice it would be necessary to define the terms electronic and digital and it is important. Signature, which is called electronic, is actually digital, because it is created by a strongly determined algorithm and essentially is a number of digits. Signature can be created performing the calculations in a written form (a long way) or by means of a special program (a quick way). The fact that the program used operates in an electronic computer equipment is not a reason to call it electronic signature, it is important that the program used worked on the basis of mathematic algorithm strictly determined for definite aims. The mess appeared in the use of terms electronic and digital has led to the situation when these terms are mutually replaced by each other and it is not correct.

One more important moment is that a computer is the equipment which is meant to fulfil an important principle, namely, to perform programmed software instructions automatically, without a person's help. This principle is very important in proof during the civil trial. Evidence creation by means of computer is different written information creation by means of writing material (stick, pen, Biro pencil and so on) or by means of mechanical typewriter which can be used by a subject.

The principal difference of creating written information by means of a computer is that the information created by a computer differs from the information created in hand by means of writing materials cannot be perceived by a human directly. The thing is that a computer can process only the information which is in digital format. All the other information, for example, sounds, pictures, equipment indicators and others can be processed by a computer only if they are transferred into a digital form. By means of software, it is possible to transform the information obtained, for example, combine the sounds from different sound sources; and then the result can be transformed back into sound form.

In the same way textual information is processed. When keying in the computer, every letter is coded by a definite digit. When keying information from outer sources (screen or print), for a human perception pictures of letters are created, which can be perceived by eyes, due to a widely spread principle WYSIWYG. The correspondence between letters and digits is named symbol coding or ASCII code. WYSIWYG principle – what you see is what you get – means that an electronic document by means of computer graphics on the screen is shown in a conventional, real and the paper document everybody is used to or photo document virtual picture with all the accompanying details, but a computer screen is viewed as a desk top on which one can work with the documents. Such electronic document pictures are understood by everyone, they can be easily read by any literate person [10]. However, it should be remembered that electronic document picture seen on the screen is created only to make it easier to work with it and it has very little common with electronic

ic document. An electronic document and its virtual picture correspondence is rather a rule exception the rule itself: the document seen or printed out have a huge difference from the initial electronic document, although a computer has formed it on the basis of initial document [11].

Signatures, or digits, in the computer use binary system and are formed by means of one and zero, not by means of ten digit system which everybody uses in everyday life. Computers work in a different digit system. Digit input and output for reading can be made in a ten digit format: all the necessary changes are made by computer software. Information measurement is one bit, which is a binary feature, which understands the meaning of 0 and 1. Usually, computer software works not with separate bits but with eight bits at the same time; eight bits in sequence make a bite, a bigger information measurement is kilobite and megabite. Due to that it can be concluded that the category "electronic evidence" essentially cannot be applied to this information which is obtained from digital sources or analogue system sources since they are not electronic.

Thus, electronic evidence is not information on facts itself, it is rather a form in which the facts are accessible for the parties to the process, in other words, electronic evidence is existing, stored or accessible in a certain form information on facts. That is the reason why the author of the paper cannot agree to the term electronic evidence, which is defined by Uldis Mikelsons, who said that *electronic evidence is the information*, which initially is fixed as data on/bymeans of any type of technical sources (tools) to store, process and transmit to the computer or other programmed technical device, system or communication network electromagnetic signals since by means of this information the facts (conditions) are determined, on the basis of which case initiator in the way determined by criminal or civil law proceedings determine legally important event or case circumstance existence or absence and other circumstances which are important to decide a correct verdict on the case [7,374]. Firstly, this definition is too complicated. Secondly, in this definition evidence in interpreted as information, which according to the author's view, cannot be allowed (this opinion was grounded above). Thirdly, this definition is not clear enough about special knowledge on fact existence format.

Additionally, emphasis of an initial fixation allows to think that with further processing or transmission, the formal can be changed, to conclude logically that it will not be electronic evidence any more.

In addition the author believes that also in Criminal Proceeding Law the definition of electronic evidence term is not very successful. Criminal Proceeding Law Article 136 includes the following: *Evidence in Criminal Proceedings can be information on facts in the form of electronic information which is processed, stored or transmitted by authorized data processing tools or systems*. A positive point in this definition is that there is a clear indication on the form itself in which the information on facts exist, but not stated that electronic evidence is also information on facts. However, the confusion is created by the thing that in this case information on facts is electronic information which is processed, stored or transmitted by means of automated data processing tools or systems.

The author's opinion is that the category "electronic evidence" can be applied as a general term, covering such evidence, which exist in digital or analogue format. On the basis of everything stated, the author considers it possible to offer the following "electronic evidence" definition:

Electronic evidence is the information in stored, processed or transmitted by means of automated data processing tools, systems or communication network in electronic form, which is/exists in digital or analogue signal format (electromagnetic signal form) and is fixed on any type of electronic technical sources (tools) if by this information the existence or absence of the fact important to the case is stated.

One more essential issue is connected with the situation that many contemporary authors do not reveal the term "electronic evidence" essence, but on purpose lead this term to "electronic document" notion. One cannot agree with this position. Electronic documents are just a part of electronic evidence, since not any information existing in electronic form features the characteristics of electronic document. It should be emphasized, that electronic evidence and electronic documents are not identical terms. In scientific literature there is an opinion, that "actually electronic evidence can be obtained both from electronic documents and in the investigation proceedings, for example, which making computer technical analysis" [7, 371].

There are different modern electronic information forms and types. Electronic information source classification can be found in civil proceeding law science. For example, D. Ose, depending on information storage device, divides it on the documents, different electronic records and things [12,166]. Versinins points that electronic documents can be differentiated depending on the way the information is keyed in the storage device (input, storage): facsimile (scanned), manually dynamic (keyed in by means of keyboard and cursor), obtained by voice transformation, etc. If information presentation (output, circulation) is taken into account, electronic documents can be visual (on the screen), printed (by means of printer or fax) or voice form [13, 40].

M. Krumins offers the following electronic source division: the first group – electronic documents, the second group – electronic information sources: correspondence and records of electronic character; audit records; electronic databases; other stored data created, transformed, transmitted in electronic format; digital photos,; audio records; CD, video tapes, micro circuits and other format of video and sound records; other forms of electronic information fixation [14].

From all the mentioned above, the most interest in the problems researched is raised by electronic documents which are obtained in visual "screen" format. Exactly this electronic evidence type is the main argument for electronic information source independence, so that it can be treated as the evidence in civil proceedings. The speech is about such evidence tools which can combine video and sound recordings (for example, video telephone). It also should be added that information computer analysis objects are not only such widely spread modern electronic information sources, as for example computers, but also electronic diaries, pagers, mobile phones and electronic cash till equipment. It is profoundly named by some authors that "this evidence differs from simple usual modern information sources since this evidence combines electronic document photo, video or audio recording features" [15, 87].

Electronic evidence judicial (evidence) character is not fully determined, but it is clear that those cannot add to written or physical evidence.

Topicality of this issue began some time with the point that it was offered to differentiate such information sources as video and audio

recordings as new evidence tools. This evidence tool independence was based on two arguments: firstly, video and audio recordings are similar to physical evidence due to the source, since information is stored on objects which are not alive (discs, plates, etc.); secondly, to play the information stored on magnetic information storage devices the methods which are different from the methods of written and physical evidence application. Physical evidence mainly is tried visually, but modern information storage devices cannot be tried by observation or testing methods [16, 97–98]. Those who disagree with the opinion expressed on "arguments which ground modern information storage device independence", point that "the features mentioned do not allow precisely separate "other documents and materials" from written evidence". As M. Treusnikovs points it, the main argument for mentioned evidence legal feature is that this evidence is viewed as written evidence, since "firstly, video and audio recordings, photo and cinema materials are stored on objects which are not alive, similar to physical evidence. However, written evidence are stored both on objects which are not alive: paper, parchment, and on modern information storage devices; secondly, paintings, drawings etc. are the result of actions done on purpose. They fix the pictures which reflect the author's thoughts and feelings. Evidence importance is emphasized on information that in those it is fixed by means of a pencil not to the object features (for example, canvas or colour quality), in which the information is fixed. So, photo, cinema, video and audio documents can be added to written documents" [16, 97-98]. I. Lukjanova suggested adding a new evidence type, however, to written evidence, keeping its investigation order [15, 136].

Since the 70-ies of previous century, in Europe country scientific literature there have been legal discussions on "documents produced by machines" term determination, its legal status and the document mentioned proof force [17,1097]. However, even nowadays there are discussions on electronic document essence, the clashes of different opinions on adding electronic document to written or physical evidence, or separating it into a different group can be seen in literature. The further the discussion goes the more normative acts which determine legal proceedings in Latvia, differently refer to theoretical disputes, consequently, Criminal

proceedings Law regulate electronic evidence separately from physical and written evidence, leaving a separate article which determines electronic evidence (Article 136). In its turn, Civil Proceedings Law does not contain a special regulation concerning electronic evidence, adding it to written evidence (Civil Proceedings Law Article 110).

Summarizing the opinions viewed the author points that information that exists in electronic form is independent evidence.

Specific features of information stored in electronic form differs it from other evidence types. These features are hidden in the aspect that in the case of information stored in electronic form the information is given by *equipment*. The court has no opportunity to clarify the investigated information, ask questions to the source which gives this information. Therefore, wide introduction of technical tools and opportunities to use special knowledge in civil proceedings, technical complexity of the cognitive methods and civil proceeding improvements made it necessary to expand the range of procedural means of proof.

Assessing the features of electronic evidence, the author considers it possible to offer the following "electronic evidence" definition:

Electronic evidence is the information in stored, processed or transmitted by means of automated data processing tools, systems or communication network in electronic form, which is/exists in digital or analogue signal format (electromagnetic signal form) and is fixed on any type of electronic technical sources (tools) if by this information the existence or absence of the fact important to the case is stated.

THE LIST OF THE USED LITERATURE AND OTHER SOURCES

1. Civilprocesa likums [Civil Proceeding Law]. "Latvijas Vēstnesis", 326/330 (1387/1391), 03.11.1998., "Ziņotājs", 23, 03.12.1998.

2. Kriminālprocesa likums [Criminal Proceeding Law.] "Latvijas Vēstnesis" 74 (3232), 11.05.2005., "Ziņotājs", 11, 09.06.2005.

3. Administratīvā procesa likums [Administratīve Proceeding Law]. "Latvijas Vēstnesis" 164 (2551), 14.11.2001., "Ziņotājs", 23, 13.12.2001

4. Līcis A. (2003) Prasības tiesvedība un pierādījumi. [Līcis A. Legislation Requirements and Evidence.] R. TNA.

5. Informācijas atklātības likums [Information Publicity Law] ."Latvijas Vēstnesis", 334/335 (1395/1396), 06.11.1998.

6. Paļčikovska M. (2007) Tiesneša objektivitāte un neitralitāte: sacīkstes principa realizācija. Jurista Vārds [Palcikovska M. Judge Objectivity and Impartiality: Adversarial Principle Realization. Solicitor's Word,] Nr.48 (501), accessible: www.juristavards.lv.

7. Uldis Miķelsons. (2002) Elektroniskie pierādījumi//Informācijas un komunikācijas tiesības. Autoru kolektīvs. U. Ķiņa juridiskajā redakcijā. [Uldis Miķelsons. Electronic Evidence//Information and Communication Law. Author team. U. Ķiņs's legislation edition.] R.

8. European Council Convention on Cybercrime accepted 23rd November, 2003, enforced 1st June, 2007, published: Latvijas vēstnesis, 171 (3539), 26.10.2006

9. Федулеева Н. (2003) Электронное издание//Библиография [Fedulejeve, N. Electronic Publishing//Bibliography.]-2003.-№4., accessible: http://www. bookresearch.ru/ebook.htm,

10. Семилетов. С.И. (2003) Электронный документ как продукт технологического процесса документирования информации и объект правового регулирования.//Государство и право. [Semiletov S. I. Electronic Document as a Product of Technological Process of Information Documentation and as an Object of Legal Regulation.//State and Law]. № 1.

11. Гадасин В.А. Конявский В.А (2004) Основы понимания феномена электронного обмена информацией. [Gadasin V.A Konjavskij V.A. Basics of Electronic Information Exchange Phenomenon]. Minsk.

12. Ose D. (2013) Pierādījumi un pierādīšana civilprocesa. Promocijas darbs. Latvijas Universitāte. [Ose D. Evidence and Proof in Civil Proceedings. Promotion Paper. University of Latvia.] 2013.

13. Вершинин А.П. (2000) Электронный документ: правовая форма и доказательство в суде. [Versinin A.P. Electronic Document: Legal Form and Evidence in Court.] M.

14. Krūmiņš M. (2015) Elektroniskie pierādījumi un to izmantošana pierādīšanas procesā. Lekcija. Zvērinātu advokātu profesionālās pilnveides mācības. [Krumiņš M. Electronic Evidence and their Application in Proof Proceedings. Lecture. Swon Solicitor Professional Development Training.]

15. Лукьянова И. Н.(2003) Доказательства в арбитражном процессе. [Lukjanova I.N. Evidence in Arbitration Process.] М.

16. Треущников М.К. (1990) Судебные доказательства. [Treusnikov М.К. Court Evidence.] М.

17. Lampe E.-J. (1970) Falschung technisher Aufzeichnungen.NJW.