

UNIFICATION OF INFORMATION TECHNOLOGY TERMINOLOGY IN POLISH LAW – SELECTED ISSUES

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Abstract: In the present article the question of systematisation of information technology terminology in Polish Law is presented. The instrument, which is used for this purpose is the Amendment to Statutes in Order to Unify Information technology terminology Act of the 4th of September 2008. With this Act the number of provisions was amended and uniform terms of information origin were introduced - as an “information data carrier”, an “electronic document”, a “data communications system” and “electronic communications means”. However, these concepts are not defined in the Act but referred to the Implementation of IT Solutions to Entities Executing Public Assignments Activity Act of the 17th of February 2005.

The article is divided into three parts. After the short preface in order to introduce the issues discussed, in the main part the author addressed the question of the above mentioned Amendment to Statutes in Order to Unify Information technology terminology Act. The summary is an attempt to make an assessment of regulation in force.

WYBRANE ZAGADNIENIA ZWIĄZANE Z PROBLEMATYKĄ UJEDNOLICENIA TERMINOLOGII INFORMATYCZNEJ NA GRUNCIE PRAWA POLSKIEGO

Abstrakt: W niniejszym artykule przedstawiona została problematyka związana z uporządkowaniem terminologii informatycznej na gruncie prawa polskiego. Narzędziem temu służącym jest *ustawa z dnia 4 września 2008 r. o zmianie ustaw w celu ujednoczenia terminologii informatycznej*. Przy jej pomocy znowelizowano szereg przepisów, wprowadzając do ich treści jednolite pojęcia o rodowodzie informatycznym: „informatyczny nośnik danych”, „dokument elektroniczny”, „system teleinformatyczny” oraz „środki komunikacji elektronicznej”. Ustawa ta jednak nie definiuje ich, ale odsyła dalej - do *ustawy z dnia 17 lutego 2005 r. o informatyzacji działalności podmiotów realizujących zadania publiczne*.

Artykuł składa się z trzech części. Po krótkim wstępie, mającym na celu wprowadzenie do omawianej materii, w części głównej została omówiona problematyka związana ze wskazaną powyżej *ustawą o zmianie ustaw w celu ujednoczenia terminologii informatycznej*. W zakończeniu zawarta została próba oceny obowiązującej regulacji.

Introduction

The transition from the 20th to the 21st century was a time of unprecedented technical progress. Previous evolutionary development - especially in the field of information science – evolved into real revolution. Jurisprudence did not adapt to the example of the occurring phenomena, not to mention the legislator. The consequences are plainly apparent in Polish law, since the hurried creation of many ill-considered regulations has caused a lack of correlation between particular statutes. The effect of this situation is chaos in the conceptual system. Two main problems appeared. Primarily, the terms used by the legislator in statutes were not defined (and if defined their definitions referred only to one, specific act – there were no definitions applying to the entire legal system). Secondly, there were many concepts describing the same referents. It was not clear whether seemingly similar terms described the same concept and, if not, what was the relationship between their objective extents. For instance, an “electronic document” was referred to as an “electronic format” or an “electronic form” and instead of an “information data carrier” an “electronic data carrier”, an “electronic information carrier” or a “computer data carrier” was used. Undoubtedly the situation must have changed.

In the Implementation of IT Solutions to Entities Executing Public Assignments Activity Act of the 17th of February 2005 (hereinafter: the Implementation of IT Solutions Act) the legislator announced the commencement of work on unification of the conceptual system. By the provision of its Art. 62, the Council of Ministers was obliged to adjust the terminology used in all statutes regarding implementation of IT solutions to the terms enumerated in Art. 3 items 1 and 2 of the Implementation of IT Solutions Act. The terms were: an “information data carrier” and an “electronic document”. Whereas, in Art. 61 section 1 it is stated that when in provisions regarding implementation of IT solutions contained in separate acts are mentioned: an “electronic information carrier”, an “electronic data carrier”, a “computer information carrier”, a “computer data carrier”, an “electronic carrier”, a “magnetic carrier”, an “information carrier” or a “computer carrier”, in case of interpretative doubts, all these terms should be understood as an “information data carrier”. While there are doubts regarding comprehension of the electronic data concept, data in electronic format, data in electronic form, information data or information in electronic format or information in electronic form, these terms should be understood as indicating an electronic document. However, in section 2 of the provision a reservation was made so that the provision did not apply to “bank laws” (Banking Law Act of the 29th of August 1997, the National Bank of Poland Act of the 29th of August 1997, the Electronic Payment Instruments Law Act of the 12th of September 2002) and this was criticised because it made comprehensive unification of terminology impossible (Martysz 2007:291).

According to the Ordinance of the Prime Minister of Poland of the 20th of June 2002 on the Rules of Legislative Techniques (hereinafter: Rules of Legislative Techniques), any term, which is used in a statute or another normative act should be defined if it is ambiguous or imprecise (and its ambiguity is not desirable), if its meaning is not commonly understood, and if there is a need to introduce a new meaning of a term because of the field of regulated issues (§ 146 of Rules of Legislative Techniques). It is

possible to use such imprecise concepts when it is indispensable to provide flexibility to provisions of a normative act (§ 155 of Rules of Legislative Techniques).

Conceptual incomprehensibility may be caused by employing specialised terms in the text of a statute (professionally specific language) or words borrowed from foreign languages, which is permissible only if there is a lack of comprehensible Polish equivalents (§ 8 section 2 items 1 and 2 of Rules of Legislative Techniques). When the introduction to a legal text of specialist (e.g. information) terminology is necessary, the precision of the text shall be the issue of primary importance, not its clarity (Myślińska 2010, in press).

However, some scholars believe that when the statute is intended for the specialists in the profession, there is no need to explain all technical terms even if a “casual” recipient could not understand them. But it should be assumed that this applies only to statutes of lesser importance (Kokoszczynski 2003:480).

On occasion it happens that the legislator evidently feels compelled and endeavours to find a Polish equivalent of a word. That was the case, for instance, of the term “interface” used in the directive on the protection of computer programs. The Polish legislator regulating the issue of legal protection of computer programs (Chapter 7 of the Copyright and Related Rights Act of the 4th of February 1994) modelled on the mentioned directive. The term “interface” used in the directive was miserably translated as a “connection” (see more: Radoniewicz 2009, *Ochrona...*, 26). Presently the term has entered to the Polish language as “interfejs” and in that form is used for instance in the Telecommunications Act, which will be discussed later in this article.

The present article focuses on the problem of sistematisation of information technology terminology in Polish law. The author applies the semantic interpretation method. It consists in explaining phrases used in statutory instruments on the basis of meaning which is typical of the Polish common language. The second method is the linguistic analysis of legal text as well as its exegesis used in accordance with a derivative conception, assuming understanding of legal text by attributing certain meaning to phrases which such text contains. Certainly, reference to legal hermeneutics was necessary. Since discussing and interpreting various regulations of the Polish legal order as well as the European Union legal acts have been indispensable, the method of legal comparison has been applied. Whereas, because of the subject examined, it has not been necessary to employ historical interpretation.

Amendment to Statutes in Order to Unify Information Technology Terminology Act

The intention of the legislator to apply methodology to an unclear conceptual system was executed in the Amendment to Statutes in Order to Unify Information technology terminology Act of the 4th of September 2008 (hereinafter: Amendment to Statutes in Order to Unify Information Technology Terminology Act), despite the fact that it contains no definitions of concepts but only references to the Implementation of IT Solutions Act. The wording of Art. 1 of this Act in order to unify information technology terminology introduces to others statutes terms such as an “**information data carrier**”,

an **“electronic document”**, a **“data communications system”** and **“electronic communications means”**, enumerated in Art. 3 items 1-4 of the Implementation of IT Solutions Act. Among them, thirty statutes should be mentioned, for instance: the Civil Procedure Code, the Census and Identity Cards Act, the Penal Code, the Banking Law, the Accounting Act, the Social Insurance Act, the Classified Information Protection Act, the Economic Freedom Act, the Electronic Services Provision Act and the Electronic Payment Instruments Act.

But before one concentrates on the terms mentioned above, it is necessary to explain the meaning and distinguish between two important concepts used by the legislator, which have never been defined; those are the terms „data” and „information” which are often regarded wrongly as one and the same or synonyms.

According to definitions contained in the Recommendation of the Council of the OECD concerning Guidelines for Security of Information Systems (OECD/GD (92) 10, Paris, 1992:

- “data” means a representation of facts, concepts or instructions in a formalised manner suitable for communication, interpretation or processing by human beings or by automatic means;
- “information” is the meaning assigned to data by means of conventions applied to that data.

In consequence it should be assumed that “information” means an “abstract object which in coded form (data), can be stored (on data carrier), transmitted (e.g. by voice, electromagnetic wave, electric current), processed during algorithm performance and used to control (e.g. computer is controlled by program being coded information)” (Kalisiewicz 1997, vol. 3, 54); although “data” are objects on which programs operate (Kalisiewicz 1997, vol 2, 15). According to the above cited it should be presumed that information has no material quality and, furthermore is not an item but is an immaterial “abstract object”. Only in the form of data can it be transmitted, processed, and stored. “Data” can have many forms, it can be records: literal, sound, digital etc. Therefore they are information carriers (media). It can be assumed they have material form but are not items. As information is regarded what can be read, decoded from data. That is why it is possible to possess computer data but be unable to use the information, which they contain for instance because of lack of knowledge of the algorithm according to which they are coded (see more: Radoniewicz 2010, in press). Distinction between these concepts is important from the legal point of view. Damaging data does not always mean damaging information; in the same way as data acquisition does not have to be information appropriation (Adamski 2000:39-40). Whereas “computer data”, according to Art. 1 of the Council Framework Decision 2005/222/JHA of the 24th of February 2005 on attacks against information systems (hereinafter: Framework Decision 2005/222), are “any representation of facts, information or concepts in a form suitable for processing in an information system, including a program suitable for causing an information system to perform a function” (see more: Radoniewicz 2009, Ujęcie..., 48-53). A similar definition is contained in the Council of Europe Convention on Cybercrime no. 185 of the 23rd of November 2001 (hereinafter: Cybercrime Convention), which was signed but not ratified by Poland. According to that document “computer data” means any representation of

facts, information or concepts in a form suitable for processing in a computer system, including a program suitable to cause a computer system to perform a function” (Art. 1 b).

Computer data are carriers or information media, facts or ideas, which are readable only in the form of computer data for an information system. For this purpose it must be “coded” in the binary language – changed into a “0” and “1” sequence and then recorded on a carrier (e.g. CD, DVD or hard disc) or transmitted by a network. According to the definition contained in the Framework Decision and the Cybercrime Convention, the programs causing an information system to perform a function may also be regarded as computer data. Computer data have material form but are not items. Whereas as items such as hard discs, floppy discs, CDs and DVDs should be regarded as data carriers.

After that introduction, it is possible to pass on to analysis of the issues, which are the main subject of the article. In Art. 3 item 1 of the Implementation of IT Solutions Act **“information data carrier”** is defined as a material or a device used to recording, storing and reading data being in digital form. Within the objective scope of this concept are all data carriers “from information point of view” i.e. floppy discs, hard discs (magnetic carriers), CDs, DVDs (optical discs), semiconductor memories (such as RAM – Random Access Memory, ROM – Read Only Memory, or mounted in printers, network interface cards), flash memories etc.

In passing it is worth mentioning that this form of the provision is from the last amendment (the Amendment to the Statute on Implementation of IT Solutions to Entities Executing Public Assignments Activity and Some Other Acts of the 12th of February 2010; hereinafter: the 2010 Act on Amendment to the Statute on Implementation of IT Solutions). Since in the original text there was an apparent mistake in the expression of “material or device used for recording or reading data in digital or analogue form”. The expression “analogue form”, by which can be meant even a written sheet of paper, used in the provision was at once roundly criticised by scholars of jurisprudence (Szpor 2007, 42; Wojsyk 2007:184-185).

The present wording of the definition is similar to the one previously expressed by a jurisprudence doctrine (Gołaczyński 2004:3; Rudkowska-Ząbczyk 2006:33-34). At the same time it is so understandable that there is no doubt regarding its objective extent, which could not be said for instance in the case of the term “computer data carrier” used in the Penal Code (see: Adamski 2000:67; Kardas 2000:89).

Focusing on the question of **“electronic document”**, it is essential to discuss the meaning of this term in the language of information science. The author thinks that it may be presumed that an electronic document means information recorded on a file (as computer data, that is in a binary form), not comprehensible to a human but readable for a computer. For a human it only becomes understandable after being decoded and changed into the form enabling sensual perception, that is for instance to the form of a sound, a text or a picture. Consequently, in an “electronic document” two forms can be distinguished: byte – readable for a computer and interface – in the form ready for visible perception by a human.

The specific feature of an “electronic document” is that it is not permanently connected with the carrier on which it was recorded, namely with a hard disc or CD.

Consequently it is possible to change its contents without changing the carrier structure, by deleting or modifying a file.

In the structure of an electronic document two elements can be identified – an “actual document” (understandable for a human) and so called metadata (“data about data” which are readable for a computer but not for a human – to make them visible to a human additional steps are necessary) which contain information regarding a specific electronic document such as authors (or co-authors) or a person (persons) responsible for its contents, document size (number of characters, size in bytes etc.), a date and time of document creation (including the date of the last modification), document status (working or final version), the document format, the purpose of its creation, document language, connection with other documents, information about copyrights etc. (Abramowicz et al. 2008:30-37; Schmidt 2008:50-58). Thus metadata facilitates organisation, storage and location of electronic documents. A set of metadata should be independent of documents (so that their minimal set could be common for all types of documents). That enables automation of documents processing independently of their contents. In effect, it is necessary to determine this minimal set of metadata and the way to connect this set with a source document. One of the most popular metadata standards is the Dublin Core Metadata Element Set (DCMES), on which are based the British, Australian, New Zealand, Danish and Polish solutions and also those of other countries (Abramowicz et al. 2008:35-36; Majak 2007:37-40). In the case of electronic documents used by public administration entities the question is regulated by the Ordinance of the Minister of Internal Affairs of the 30th of October 2006 on the Indispensable Elements of an Electronic Document Structure.

In 1996 UNCITRAL (The United Nations Commission on International Trade Law – the commission, which was established by the United Nations General Assembly in 1966 to promote the progressive harmonisation and unification of international commercial law) passed the Model Law on Electronic Commerce. In the document were formulated general rules of using modern electronic communications methods and storage of data (including: Electronic Data Interchange and usage of electronic mail). It did not include a definition of the electronic document. However, in Art. 2 (a) “Data message” was defined as “information generated, sent, received or stored by electronic, optical or similar means including, but not limited to, electronic data interchange (EDI), electronic mail, telegram, telex or telecopy”. The same definition was used in the Model Law on Electronic Signatures, the Convention on the Use of Electronic Communications and in the document Promoting Confidence in Electronic Commerce.

In Regulation No. 1049/2001 regarding public access to European Parliament, Council and Commission documents, a very wide definition of document was expressed and its objective scope included also an “electronic document”. According to the provision of Art. 3 as a document is regarded “any content whatever its medium (written on paper or stored in electronic form or as a sound, visual or audiovisual recording) concerning a matter relating to the policies, activities and decisions falling within the institution’s sphere of responsibility”. In that definition the contents of a document are highlighted, not the form (Janowski 2008:172; Kotecka 2007:27). Consequently the way

in which it is recorded is not important; there is no difference between a record on paper and on information data carrier.

In Art. 3 section 2 of the Commission Decision amending its Rules of Procedure an “electronic document” was defined as “a data-set input or stored on any type of medium by a computer system or a similar mechanism, which can be read or displayed by a person or by such a system or mechanism, and any display or retrieval of such data in printed or other form”. It should be taken into consideration that in the above mentioned definition it is clearly indicated that as an electronic document should be regarded also “any display or retrieval of data in printed or other form”.

The concept of electronic document was determined in the provision of Art. 3 item 2 of the Implementation of IT Solutions Act. According to its contents as an electronic document is meant a data set being a separate integrity organised in a determined internal structure and recorded on an information data carrier.

According to the above definitions, an electronic document must have three attributes. First of all, it must be a data set, which is a separate integrity. Secondly, a data set must have a determined, organised structure. Thirdly, it has to be recorded on an information data carrier. As stated by Adamski and Kutylowski before that definition was expressed the term had been regarded in an “intuitive manner”. For that reason, taking into consideration the importance of legal certainty, the interest and action of the legislator was desirable. On the other hand, the concept of a document is not defined and the category of an “electronic document” is very broad and is simultaneously evolving with technical progress. Therefore, the formulation of an excessively specific definition is not desirable. Instead, clarification of the exact objective extent of the term should be actually left to judicial doctrine and decisions (Adamski and Kutylowski 2006:41).

The definition was rightly criticised on the basis of legal doctrine, which indicated its two fundamental weaknesses. Firstly, according to the definition, an electronic document has to be recorded on an information data carrier. Consequently, when transmitted by a network it actually cannot be regarded as a document any more (Janowski 2008:175; Kotecka 2007:30). Secondly, the requirement of a “determined internal structure” is not justified since an internal structure of a document is fixed by the organised and integrated data that it contains. The condition of a “determined internal structure” implies that the structure is not connected with data any more (with the semantic context of the term) but with the technical and formal manner of their organisation in a document. As a result, it means that a record in electronic form cannot be regarded as an “electronic document” until its internal structure is defined. Simultaneously, the Act does not indicate which entity and according to what procedure that should be fulfilled. It may cause limitation of the term “electronic document” to the meaning of normalised formats and electronic forms. (Adamski and Kutylowski 2006:41; Janowski 2008:176; Kotecka 2007:30). Scholars concentrate on the fact that according to the definition, to sign an “electronic document” an electronic signature is not required, nor is any protection regarding its authenticity and integrity. (Janowski 2008:175; Kotecka 2007:31).

During the work on the Implementation of IT Solutions Act it was planned that it would include the definition of “**data communications system**”. Nevertheless, the idea was rejected and in the provision of Art. 3 item 3 of the Act only a reference was made to the definition contained in Art. 2 item 3 of another statute, the Electronic Services Provision Act of the 18th of July 2002 (hereinafter: Electronic Services Provision Act). As a consequence, this became a definition applicable to the whole of the legal system (Litwiński 2007:192). This solution was criticised in the legal doctrine (Bernarczyk 2005:381-382; Szpor 2007:44; Gołaczyński 2009:38) for two reasons. Primarily, the provision of Art. 2 item 3 referred to the Telecommunications Act of 2000, which was contrary to the norm of § 157 of rules of legislative techniques, which forbade reference to provisions containing further references. The unacceptability of such a method for creating definitions was highlighted by juridical decisions and the doctrine (see more for instance in Myślińska 2010, in press; and literature indicated there).

Secondly, the Telecommunications Act of 2000 is not in force. It was annulled with the Telecommunications Act of 2004. With the Amendment of the Statute on Implementation of IT Solutions Act of 2010, the definition of data communications system (referring to the Telecommunications Act in force) was inserted to the Implementation of IT Solutions Act and thus way it became a definition applying to the entire legal system. Since it is basically identical with the definition established in the Electronic Services Provision Act (the only difference is that the latter still refers to the Telecommunications Act of 2000), most of the above mentioned statements of scholars regarding the definition included in the Electronic Services Provision Act concern both of them (and when the legislator corrects his error and amends the Electronic Services Provision Act introducing to its provision of Art. 2 item 3 the reference to the Telecommunications Act of 2004 in force, there will be only one definition applying to the entire legal system, embodied in two legal statutes). Therefore a data communications system is a group of cooperating computer devices and software providing data processing, storage as well as transmission and reception through telecommunications networks by means of the final device appropriate for the network in question in the meaning of Telecommunications Act of the 16th of July 2004.

In the definition of a data communications system there are two references to the Telecommunications Act regarding the meaning of two concepts: a “telecommunications network” and “telecommunications terminal equipment”. According to the definition included in Art. 2 item 35 of the Act, a “telecommunications network – means transmission systems and switching or routing equipment and other resources that allow the sending, receipt or transmission of signals by wire, by radio waves, by optical waves or other means using electromagnetic energy, irrespectively of their type” (cited from: Piątek et al. 2005, 61). The definition of “telecommunications network” is an implementation of the definition of “electronic communication network” contained in Art. 2 (a) of the Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services [Framework Directive] (hereinafter: Framework Directive). According to this, as an “electronic communication network” is regarded “transmission systems and, where applicable, switching or routing equipment and other resources which permit the conveyance of signals by wire, by radio, by optical or by

other electromagnetic means, including satellite networks, fixed (circuit - and packet-switched, including Internet) and mobile terrestrial networks, electricity cable systems, to the extent that they are used for the purpose of transmitting signals, networks used for radio and television broadcasting, and cable television networks, irrespective of the type of information conveyed” (this definition was modified as a consequence of the last amendment of the framework directive - see Art. 1 of the Directive 2009/140/WE). Many member states used definitions from the Framework Directive when implementing provisions of so called electronic communications directives (Directive 2002/19/EC on access to, and interconnection of electronic communications networks and associated facilities [Access Directive], Directive 2002/20/EC on the authorisation of electronic communications networks and services [Authorisation Directive], Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services [Framework Directive], Directive 2002/22/EC on universal service and users’ rights relating to electronic communications networks and services [Universal Service Directive], Directive 2002/58/EC concerning the processing of personal data and the protection of privacy in the electronic communications sector [Directive on privacy and electronic communications], Directive 2002/77/EC on competition in the markets for electronic communications networks and services and Commission Directive 2002/77/EC on competition in the markets for electronic communications networks and services). That has been for instance the case in Germany regarding the Telecommunications Act (Telekommunikationsgesetz) of the 22nd of June 2004. The Polish legislator reacted differently, creating his own definition, which differs from the prototype of the Framework Directive. In the prototype in question there is a reservation “where applicable” placed before the expression “switching and routing equipment and other resources”. This means that it is not always necessary to use these devices (Krasucki 2008, 64). It makes the definition of Framework Directive broader than the Polish equivalent in which there is no such reservation.

As previously mentioned, in the Art. 3 item 3 defining data communications system there is another reference - to the contents of Art. 2 item 43 of the Telecommunications Act in which telecommunications terminal equipment is defined as “any telecommunication product which is intended to be connected directly or indirectly to network termination points” (cited from: Piątek et al. 2005:63). In the latter case, between terminal equipment (for instance a network interface card, telephone, TV set) and a network termination point there is another device intermediating in signal transmission, for example: a modem, modem DSL (Digital Subscriber Line), or decoder. Whereas, according to Art. 2 item 52 of the Telecommunications Act, the network termination means a physical point at which a subscriber is provided with an access to a public telecommunications network (a public telecommunications network used mainly for the provision of publicly available telecommunications services, that is services available to the general public: Art. 2 item 29 in connection with Art. 2 item 31), on condition that, in the case of networks involving switching or routing, the network termination is identified with a specific network address, which may be linked to a number or a name of a subscriber.

The expression “mainly for the provision of publicly available telecommunications services” used by the legislator is crucial for the understanding of the above cited definition and enables solution of the problem of networks providing services for various groups of users („general public” users as well as others, for instance belonging to an organisation of a service provider). It is evident then that as a non-public network should be regarded only a network used for internal purposes or used for providing non-public telecommunications services (Piątek 2005:86-87).

Monarcha-Matlak rightly points to a lack of precision in the legislation having in mind the usage of the term “information device” in the definition of data communications system although it means only a device for data processing and storing, not transmitting. Furthermore the other part of the definition shows that data transmission was also intended by the legislator. In that case the term “electronic (or data communications) device” should have been used as it was in the definition of “electronic communications means” embodied in the same act or, for instance, in the definition of service provided electronically which is a part of the Protection of Some Services Provided Electronically Based on or Consisting of Conditional Access Act of the 5th of July 2002 (Monarcha-Matlak 2008:66-67; see also: Konarski 2004:63).

It is significant that the definition of data communications system is also embodied in Art. 2 item 8 of the Classified Information Protection Act of the 22nd of January 1999. According to this Act as a data communications system should be regarded “a system composed of devices, tools, rules of conduct and procedures kept by specialised personnel in the manner ensuring creation, storage, processing and transfer of information”. X. Konarski, comparing the above-cited definition with the definition from the Electronic Services Provision Act stated that in the latter omitted the issue of rules of conduct and procedures kept by staff, which is essential for a technical meaning of the term “system” and their omission is a relevant error (Konarski 2004:61-62).

The legislator defining the term of “data communications system” does not address the concept of „information system” (present in other legal acts, inter alia in the Penal Code), which is justly interpreted as a fault (Szpor 2008:43). The definition of the term can be found in the Framework Decision 2005/222, according to which it means “any device or group of inter-connected or related devices, one or more of which, pursuant to a program, performs automatic processing of computer data, and also computer data stored, processed, retrieved or transmitted by them for the purposes of their operation, use, protection and maintenance”. Similarly, it is included to the Convention on Cybercrime, in which instead of “information system” the term “computer system” is applied by which is meant “any device or a group of interconnected or related devices, one or more of which, pursuant to a program, performs automatic processing of data”. Consequently, it should be assumed that an information system is utilised for data processing and a telecommunication system – as was stated before – for their transmission. It means that a data communications system is a structure fulfilling both tasks, that is, such a structure by which computer data is processed and transmitted by means of a telecommunications network. Especially, as a structure of this kind should be regarded an information system connected to a telecommunications network with the aid of which data are transmitted. A good example might be all records organised in an

information system, within which operations on stored data are carried out. When the data are made accessible for the system administered by another entity, the system starts to be a data communications system (Konarski 2004:62-63).

In Polish law the concept of “information system” was defined in Art. 7 item 2a of the Personal Data Protection Act of the 29th of August 1997, as “a group of cooperating devices, programs, procedures regarding processing information and software tools used for data processing”.

In Polish statutes (among others in the Penal Code) there is one more term related to the data processing issue – a data communications network - which is, as it should be presumed, a type of telecommunications network. The structure of this type of network came into existence in connection with the convergence of extensive computer networks (as LAN – a local area network, WAN – a wide area network, MAN – a metropolitan area network) and telecommunications networks (Konarski 2004:64; Urbanek 1999:3-5). In Polish Law the term was defined in the Classified Information Protection Act of the 22nd of January 1999, as an organisational and technical construction of two data communications systems (Art. 2 item. 9).

The provision of Art. 3 item 4 of the Implementation of IT Solutions Act, regarding the question of the meaning of “**electronic communications means**” refers to Art. 2 item 5 of the Electronic Services Provision Act. According to that article, as electronic communications means should be considered technical solutions, including data communications devices and cooperating with them software tools, which enable individual communications at a distance through data transmission between data communications systems, especially as such a means should be regarded electronic mail. The definition refers to the contents of the Directive 2000/31/EC on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (Directive on electronic commerce), in which the expression “electronic mail or equivalent individual communications” was used. The Polish definition has a functional purpose – it applies to the function of devices enabling individual communications at a distance, by means of data transmission between data communications systems. The advantage of such a set phrase is that it does not refer only to existing solutions but it covers also electronic communications means which will be created in the future (Gołaczyński 2009:45; Litwiński 2007:193). In the provision, as an example of a communications means, electronic mail is indicated. As similar means can also be regarded other solutions which make use of the Internet and are utilised for communication at a distance through data transmission, for instance discussion groups and IRC. In the subject area of the term there is also communication by mobile phones (including SMS and MMS) and beepers (Gołaczyński 2009, 45; Konarski 2004, 74). There are doubts whether Instant Messengers (IM), as AIM, Skype or Miranda can be classified as means of electronic communications (Konarski 2004:74). Though, in my opinion there is no obstacle to such qualification. Therefore, certainly, similarly web pages cannot be regarded as means, since they do not enable individual communications (Litwiński 2007:193). Regarding the issue, it is noteworthy, that in the ruling of the 5th of December 2006 the Provincial Administrative Court in Warsaw rightly declared that service of a document via fax cannot be regarded as service of a document through

electronic communications means, as stated by Art. 391 § 1 of the Administrative Proceedings Code, regarding electronic services provision. It was indicated that a fax is not an information device because, as such devices, are meant computers equipped with memory enabling data reading and writing.

In the field of doctrinal theory a sharp distinction is highlighted, which is made by the legislator, between “electronic communications means” and “information data carriers”. The first is used for communication at a distance, the second one - only for data recording (Gołaczyński 2009:45; Monarcha-Matlak 2008:65).

Concluding remarks

In author’s opinion, despite activity undertaken by the Polish legislator to unify information technology terminology, some shortcomings in that sphere are still encountered. Certainly, the Amendment to Statutes in Order to Unify Information technology terminology Act is an important improvement. The Amendment has introduced to a series of laws unified information terms (replacing the previous ones). The definitions of such unified terms are found in the Implementation of IT Solutions Act. Indeed it is exactly this which arouses certain controversies. One of them is the definition of electronic document which has serious faults, as was indicated. Simultaneously, it should be mentioned that not all important information terms were defined and that is something which is perceived to be indispensable, especially in the cases of “computer data” and “information system” (Kunicka-Michalska 2005:527; Marek 2007:484; Radoniewicz 2010, in press). But it must be admitted that the legislator, although not immediately, has taken scholastic opinions into consideration. As an example the Amendment of the Statute on Implementation of IT Solutions Act of 2010 may be recalled, the result of which was to apply the definition of data communications system directly to the Implementation of IT Solutions Act and to modify the definition of “information data carrier”.

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