

A COMPARATIVE ANALYSIS OF THE LIABILITY OF INTERNET SERVICE PROVIDERS IN THE CONTEXT OF COPYRIGHT INFRINGEMENT IN THE U.S., EUROPEAN UNION AND POLAND

by

MALGORZATA LESIAK*

The subject matter of the present article is the legal position of Internet Service Providers which has been hotly debated in the US and then in the EU for more than a decade now. Although the European model has been inspired to a significant degree by the American solution, several important differences are present. This is not only a result of a copyright-centered American paradigm, which can be contrasted with a horizontal regulation of the liability of intermediaries in the European directive on electronic commerce. The aim of this contribution is to discuss the most important differences between the two regimes, with a special emphasis on the position of online intermediaries in Poland.

KEYWORDS

Internet Service Providers, liability, copyright infringement, DMCA, E-commerce Directive, hosting, caching, mere conduit, transitory communications, notice and takedown

1. INTRODUCTION

The Internet, one of the most momentous technological advancements of the last decades, has understandably impacted every domain of human activity. Sharing and copying of music files, films or television programs now happens at a click, without the need to invest excessive amounts of time, money and resources. Additionally, being a global network, the Internet gives small-scale actions the potential of having ramification for all end users. It is primarily because of this fact, that the Internet has also made its mark in the legal sphere. This multitude of new possibilities has particularly

* The author is a student at the Faculty of Law and Administration University of Warsaw and cooperates with the Centre for Law of the New Technologies.

affected copyright, which was always closely related to technological advancement. The technological revolution which occurred in the recent years, especially its pace and scale, has gone beyond everyone's expectations and led to a kind of a copyright crisis, in the sense that the time-consuming process of creating new legislation has failed to keep up with the emergence of new phenomena, such as previously unknown ways of content-sharing.

Among the many aspects related to breaking the law on the Internet, one of the most important is the question of responsibility of individuals involved in providing access to different types of materials via the Internet, the so-called Internet service providers.¹ Although they do not directly participate in the process of transmission or giving access to legally protected content on the Internet, they can contribute to breaking the law by means of creating technological possibilities of abusing legally protected goods. According to the US approach, liability may arise from theories of direct² and indirect or contributory infringement³ in national tort law, criminal law, and intellectual property law. As cases involving file sharing services have proven, the issue of ISP liability is closely tied to the interests of rightholders and wronged parties who sued both individual users and Internet service providers, for direct and contributory infringement respectively. Similarly, the problem of the extent of the obligation of ISP's to transmit data on users allegedly involved in illegal conduct, also calls for limiting the liability of ISP's. It has thus proven necessary to create regulations which would not only safeguard the observance of copyright on the Internet, but also ensure the safety of service providers, in case of their inability to prevent illegal actions.

The issue has already spawned a number of publications by authors well aware of the complexities involved in defining ISP liability. Influential works were created on different aspects of the phenomenon. Among others, P. Hugenholtz⁴ wrote on the interplay between the practice of caching and

¹ ISP (Internet Service Provider)- the term ISP originally referred to a vendor who provided access for customers to the Internet and the World Wide Web, as well as e-mail services and other services. The term has been significantly expanded over time and presently encompasses a wide array of different types of service providers. An ISP may provide Internet access services on a retail basis to residential and/or business customers. An ISP may operate only a backbone network and provide access services to that backbone network on a wholesale basis to other ISPs. Some ISPs provide hosting services. Some ISPs provide server caching. Other ISPs do not provide any of these services and only operate portals. Any ISP may provide only a search engine or some other e-commerce tool; hereinafter ISP

² Direct Infringer- is one who actually commits an infringing act, e.g. one who makes and shares copies of a copyrighted work, or otherwise directly infringes on the copyright, trademark, or patent rights of another.

³ Contributory Infringer – one who knows or has reason to know of the infringement and induces, causes, or materially contributes to infringing conduct of another.

⁴ Hugenholtz, P. B. 1999, Copyright aspects of caching- Digital Intellectual Property Practice Economic Report (Dipper Report).

copyright, M. Lubitz and R. Julia-Barcelo⁵ provided a comparative analysis of ISP liability solutions in the US and EU, while P. Baistrocchi⁶ discussed in detail the liability of intermediary service providers in the E-Commerce Directive. The same issue was also presented in a seminal article by R. Julia-Barcelo and K. Koelman. In Poland, X. Konarski and P. Podrecki⁷ commented in a number of seminal works on the implementation on ISP liability regulations into the Polish legislation.

As has already been said, ISP's provide potential offenders with possibilities of storage and transmission of data files which can be used to violate intellectual property rights. A question therefore arises whether and to what extent they should be held liable if unlawful behavior has actually occurred. Since financial and technological constraints make it hardly possible for ISP's to monitor and filter all of the stored content, there appears a need to limit their liability by means of creating an appropriate legal framework. Although adopted at the national level, these new regulations should be inter-operable on a global scale.

2. THE MOST IMPORTANT REGULATIONS CONCERNING THE LIABILITY OF INTERNET SERVICE PROVIDERS FOR COPYRIGHT INFRINGEMENT

In December 1996 WIPO held a diplomatic conference during which, after prolonged negotiations, the WIPO Copyright Treaty (WCT)⁸ and the WIPO Performances and Phonograms Treaty (WPPT)⁹ were finally adopted. The United States signed both treaties, and the European Union (EU) implemented them through the Copyright Directive.¹⁰ The importance of WIPO solutions lies therein, that they provided guidelines for the creators of both the DMCA¹¹ and the E-Commerce Directive,¹² although, as has to be admitted, the original WIPO attempt to strike a balance between copyright owners

⁵ Barcelo R.J. & Koelman K. J. 2004, 'Intermediary Liability In the E-commerce Directive: so far so good, but it's not enough', *Computer Law & Security Report*, no. 4.

⁶ Baistrocchi P.A. 2002, 'Liability of Intermediary Service Providers in the EU Directive on Electronic Commerce', *Santa Clara Computer & High Technology Law Journal*.

⁷ Konarski X, "Komentarz do ustawy o świadczeniu usług drogą elektroniczną, Warszawa 2004,

⁸ WIPO Copyright Treaty (1997) hereinafter WCT

⁹ WIPO Performances and Phonograms Treaty, hereinafter WPPT

¹⁰ Directive (EC) 2001/29 of the European Parliament and of the Council of 22 May 2001 on the harmonization of certain aspects of copyright and related rights in the information society (2001) OJ L167/10 (hereinafter Copyright Directive)

¹¹ Digital Millenium Copyright Act, 17 U.S.C. § 1201 (2000) hereinafter DMCA

¹² Directive (EC) 2000/31 of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce in the Internal Market (2000) OJ L178/1(hereinafter E-Commerce Directive)

and users of digital networks has not been translated into the US and European regulations with full success.

The Agreed Statement Concerning Article 8 of the WCT WIPO Treaty 1996 provides:

„It is understood that the mere provision of physical facilities for enabling or making a communication does not in itself amount to communication within the meaning of this Treaty or the Berne Convention.“

What these words effectively amount to is that under the provisions of the treaty the ISP cannot be held liable for direct infringement, whereas the possibility of indirect infringement is not excluded.

As has been already said, WIPO solutions inspired a number of regulations in the field. For instance, the rationale behind the creation of the DMCA, which implements the WIPO treaties, was to update U.S. copyright law, Title II of which deals with limitations on the liability of ISPs. This title has been incorporated as a newly created Section 512 in the U.S. Copyright Act¹³, whose title (“Limitations on Liability Relating to Material Online”) already elucidates that these provision are not intended to regulate whether an ISP has committed an infringement or not. Rather, limitations on liability only apply if the ISP’s behaviour has qualified for infringement according to existing principles of copyright law.

The provisions of the DMCA (§ 512 a) to e)) refer to the different kinds of services provided:

§ 512(a) refers to transitory network communications (mere conduit) and stipulates that service providers should not be held liable for traffic data that passes through their networks, under the condition that this occurs it automatically and they do not control or modify the data.

§ 512(b) covers system caching services.

§ 512(c) limits the liability of service providers for infringing material on websites (or other information repositories) hosted on their systems (Limitation for Information Residing on Systems or Networks at the Direction of Users), if following conditions are met:

- the provider does not have knowledge of the infringing activity;
- the provider has the right and ability to control the infringing activity;
- the provider does not derive any financial benefit directly attributable to the infringing activity;
- upon receiving proper notification of claimed infringement, the provider expeditiously takes down or blocks access to the material.

¹³ Copyright Act of 1976 is the federal statute that governs copyright law in the United States,

3. NOTICE AND TAKE DOWN PROCEDURES

Contrary to the E-Commerce Directive, the provisions of the DMCA also establish procedures for proper notification and takedown (§ 512(c)(3)).

Thus proper notification requires:

- written communication to the ISP or its agent including signature of a person authorized to act on behalf of the copyright owner;
- identification of the copyrighted work claimed to have been infringed;
- identification of the material claimed to be infringing;
- information reasonably sufficient to permit the ISP to contact the complaining party;
- a statement by the complaining party of its good faith belief that use of the material is not authorized by the copyright owner; and
- a statement that the notification information is accurate (§ 512(c)(3)(A)).

Under the DMCA, the ISP does not have to monitor its service for infringements; the burden of proof rests on the copyright holder. When notified of an infringement, the ISP must expeditiously remove or disable access to allegedly infringing material (§ 512(b)(2)(E)).

ISPs wishing to take advantage of these limitations on liability must designate an agent to receive notification of claimed infringements; the Register of Copyrights is to maintain a directory of these agents (§ 512(c)(2)).

The DMCA provides that an intermediary cannot be held liable if they block access in good faith upon notification or believing that the material is infringing, regardless of whether the material is ultimately determined to be infringing or not. Furthermore, the DMCA states that to remain immune to all claims, a hosting service provider who removes material upon notification must promptly notify the subscriber that access to his web page has been disabled. They have to put the content back on the server upon receipt of a “counter notification” from the web site owner claiming that the removal was unjustified, but not if the first claimant, after they were informed of the counter-notification, has filed for a court order to restrain the alleged infringer from engaging in the infringing activity. Finally, any person who knowingly misrepresents that material is infringing is liable for damages incurred as a result of a provider acting upon such misrepresentation.

4. THE EUROPEAN APPROACH (DIRECTIVE 2000/31/EC)

In order to ensure an uninterrupted flow of information within the network and the development of electronic trading activities, the provisions included in Articles 12 to 15 of the E-commerce Directive define the scope and nature of the liability of Internet service providers. Taking into account the

fact that ISPs would be reluctant to provide their services in the prospect of being held liable for the illegal content placed on their network facilities by third parties, as well as the fact that if such a duty was placed upon them it would be impossible for them, time- and money-wise, to carry it out, the E-Commerce Directive sought to limit the scope of ISP liability in this field. Additionally, the obligation to monitor would probably translate into much higher costs for services recipients and could constitute an attempt to limit the freedom of expression.

First and foremost, rather than establish liability, the E-Commerce Directive's provides for limitations of the liability for certain online service providers when such liability arises under national legislation. Thus if an ISP fails to qualify for an exemption as defined in the Directive, its liability will be determined by the applicable provisions of the national law of the respective Member State. It has to be said at this point that the limitations apply only to liability for damages, since it is stated in the last paragraphs of Articles 12, 13, and 14 that Member States retain the right to require the ISPs to terminate or prevent known infringements by means of injunctions and court orders, including prohibitory injunctions, which require ISPs to desist from illegal activities, as well as mandatory injunctions whereby an ISP is required to rectify any wrongdoing which has occurred.

Second, unlike the DMCA, the Directive introduces a horizontal model of liability limitations, meaning that they cover liability for all types of illegal activities initiated by third parties, including copyright and trademark infringements, acts of unfair competition etc.

Lastly, the Directive liability distinctions are based on different categories of services provided by the ISPs, rather than on different categories of service providers. Only three specific types of online service providers (*i.e.*, mere conduit, caching, and hosting providers) are covered by the liability limitations. All three types will now be discussed.

5. ARTICLE 12 "MERE CONDUIT"

The article provides for two types of "mere conduit" activities. The first one is characterized as "the transmission in a communication network of information provided by a recipient of the service." The second type of mere conduit activity is commonly referred to as "providing Internet access", in which process mere conduit activities include the automatic, intermediate and transient storage of the information transmitted, under the condition that the exclusive purpose of these activities is to carry out the transmission and that once this has been done the information will not be stored any longer.

Under the conditions established in Article 12 the ISPs cannot be held liable as long as they do not :

- initiate the transmission; it needs to be stipulated at this point that an automatic initiation of the transmission at the recipient's request does not constitute initiating the transmission;
- select the receiver of the transmission; this includes forwarding e-mail to a mailing list at the request of the recipient;
- select or modify information contained in the transmission; not including manipulations of a purely technical nature.

6. ARTICLE 13 CACHING

The purpose of a caching service is to avoid overloading the Internet with the repetitive high demand of certain popular material by storing copies of it on local servers, thus facilitating access to it. This automatic, intermediate and temporary storage of data in local servers is called “caching” for the purposes of the Directive. Other types of caching, such as long-term caching, are not included in the liability exemptions.

ISPs cannot be held liable when they perform caching on the condition that:

- the provider does not modify the information;
- the provider complies with conditions on access to the information;
- the provider complies with rules and professional codes regarding the updating of information, specified in a manner widely recognized and used by the industry;
- the provider does not interfere with the lawful use of technology widely recognized and used by the industry to obtain data on the use of the information; and
- the provider acts expeditiously to remove or to disable access to the information it has stored upon obtaining actual knowledge of the fact that the information at the initial source of the transmission has been removed from the network, access to it has been disabled, or that a court or an administrative authority has ordered such removal or disablement.

7. ARTICLE 14 HOSTING

Finally, the service of “hosting” is defined as providing a possibility to individuals, companies, and organizations to rent space and incorporate any kind of data on the space.

ISPs will not be held liable for performing this activity as long as,

- the provider does not have actual knowledge of illegal activity or information and, as regarding claims for damages, is not aware of facts or

circumstances from which the illegal activity or information is apparent;
or

- the provider, upon obtaining such knowledge or awareness, acts expeditiously to remove or to disable access to the information.

It is also provided that the above-mentioned shall not apply when the recipient of the service is acting under the authority or the control of the provider, since it would stand in direct opposition to the requirement that ISPs have no control over the information stored.

8. NO GENERAL OBLIGATION TO MONITOR

Article 15 of the Directive stipulates that Member States shall not impose a general obligation on providers to monitor the information they transmit or store when performing **one of the services analyzed above**, and shall not compel to seek evidence of wrongdoing, for the already mentioned reason that it could render the provision of these services extremely inefficient due to technological, financial and time-related constraints.¹⁴ On the other hand, a court or administrative authority should still be able require the provider to terminate or prevent an infringement in accordance with Member States' legal systems.

Article 15 establishes as well more specific obligation for ISPs, requiring them "to promptly inform the competent public authorities of alleged illegal activities" or information provided by the ISP's customers, or to "communicate to the competent authorities", at the request of the authorities, information that enables the identification of those customers with whom the ISP has a storage agreement in case of suspected illegal activities, while taking into account the privacy and the right to freedom of expression of the service recipients.¹⁵

With regard to Article 15, attention has also been drawn to the fact that its application may be obstructed due to interpretation of Recital 48 which obliges providers to "apply duties of care, which can reasonably be expected from them and which are specified by national law, in order to detect and prevent certain types of illegal activities". As a result of this inconsistency, some legal commentators argue that Recital 48 should not be taken into account.¹⁶

¹⁴ Baistrocchi, P.A. 2002, 'Liability of Intermediary Service Providers in the EU Directive on Electronic Commerce' Santa Clara Computer & High Technology Law Journal, pp. 126.

¹⁵ *Ibidem*, pp. 126.

¹⁶ *Barcelo, R.J., & Koelman, K.J. 2000, ' Intermediary Liability In The E-Commerce Directive: So Far So Good, But It's Not Enough', Computer Law & Security Report, no. 4, pp. 231-239.*

9. HYPERLINKS AND SEARCH ENGINES

There are no specific limitations to liability for providers of hyperlinks and search engines in the E-Commerce Directive. The European Commission shall examine any future need to adapt the present framework, with liability for hyperlinks and search engines being high on the agenda.

Only Austria, Portugal and Spain have enacted specific rules providing for limitations on the liability of link providers, along the lines of Article 14 of the E-Commerce-Directive.¹⁷

The absence of specific rules in the E-Commerce Directive has led to inconsistent and complex case law in EU Member States.

10. POLISH REGULATIONS

The Act on Providing Services by Electronic Means¹⁸ implements the provisions of the E-Commerce Directive excluding the liability of three types of information society services providers. The act excludes the liability of telecommunications entities providing Internet access services for the data transmitted (Article 12), despite the fact that the provisions of this law do not apply to telecommunications entities (Article 3, Clause 3). (This provision was amended, which will be discussed later).¹⁹

An entity providing the so-called caching services shall not be held liable for the content stored if a number of conditions customarily required for this type of activity has been fulfilled.

Finally, a party providing the so-called hosting services shall not be held liable for data stored on an all-access server, unless they are aware of lawless character of data or has received an official notification or "reliable information of lawless character of data".

The Polish legislator clearly stipulates that in case of blocking access to such controversial content hosting providers shall not be held liable against the service recipient for the damage done (Article 14, Clause 2 and 3).

The problem is, however, how to define reliable information on lawless character of the data stored.²⁰ To render the term more precise, one may resort to the lexical meaning of the word 'credible', understood as *trustworthy, beyond doubt, truthful*, therefore the message should hail from an entity which can be thus characterized, for example the party whose rights are

¹⁷ First Report on the application of Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (Directive on electronic commerce)

¹⁸ Act of 18 July 2002 on Providing Services by Electronic Means, Journal of Laws No. 144/2002 item 1204 et al

¹⁹ Kosmala, K., 'Dyrektywa o handlu elektronicznym i projekt jej implementacji', <http://www.prawo.vagla.pl>.

²⁰ Litwiński & Podrecki 2005, "Prawo Internetu", Warszawa, pp. 211.

subject to infringement or third parties. In its due form, the message is to be aimed directly at the service provider, which excludes the possibility of delivering information through media coverage. Apart from that, it is to include the source of information as well as a more elaborate content than an official notification. In the case of the latter, it is not the proofs delivered in the content of a notification that trigger the takedown procedure, but rather the sheer authority of the court or an administrative body. It remains a controversial issue whether the service provider should block access to data already receiving rulings or decisions which at that point are not yet legally binding. According to X. Konarski,²¹ the term "official notification" also includes rulings and decisions which are not yet legally binding. Moreover, the Act sets forth that on the point of receiving an official notification, an ISP is relieved from the obligation to inform a service recipient about the intention to disable access to data.

Additionally, it is not clear whether the exclusion referred to in Article 14 may be applied to entities which only allow service recipients to post content on their websites (Web 2.0).

It should also be stated at this point that neither a telecommunications entity providing Internet access services, nor a caching, nor a hosting service provider are obliged to monitor the data being transferred, stored or made available (Article 15 of the Act, Article 15 of the directive).

The regulation is of a horizontal character so regardless of liability regime (civil or penal law), as well as the type of infringement (copyright, personal rights), in case of fulfilling a number of conditions the entity shall not be held liable.

11. THE AMENDMENT TO THE ACT ON PROVIDING SERVICES BY ELECTRONIC MEANS

10 October 2008 a bill was passed on the amendment to the act of 18 July 2002 on Providing Services by Electronic Means.

The amended act precisely defines the term electronic provision of services (Article 2 Point 4). It is the provision of a service without both parties being physically present at this event through data transmission on an individual demand of the service recipient, transferred and received by means of using electronic processing devices, including digital compression devices, and data storage devices, and which is broadcast, received or trans-

²¹ Konarski, X. 2004, *Komentarz do ustawy o świadczeniu usług drogą elektroniczną*, Warszawa.

mitted in its totality via telecommunications network under the provisions of the act of 16 July 2004 – Telecommunications law.²²

Also, doubts have been cleared concerning whether the act applies to services provided by telecommunications services operator which consist in data transfer or signals between the ends of a telecommunications network, as far as the transfer is done according to the rules defined in Article 12 of the act (Article 3, Clause 3).

The last modification that the amendment introduces concerns Article 13 Clause 1 Point 1 regarding caching. No party shall be held liable for the data stored if they did not modify it when they transmitted and allowed for automatic and short-term indirect storage of data aimed at speeding up access to it on demand of a different entity. The former wording was “doesn’t remove or modify data”, which in practice was unfeasible, since during the process of caching, it is normal that data is cyclically removed when memory is full, which is a purely technical process.

The catalogue defined in Articles 12-15 does not include all „intermediary” Internet occurrences. Most importantly, the present state of legal matters provides neither for “intermediary” situations involving content owned by a third party through posting links to different websites where this content is available, nor for the provision of service consisting in searching information regarding the contents location on the Internet search systems.

However, as experience goes to show (Cf. the ruling of the Administrative Court in Krakow of 20 July 2004, Ref. No. IAca 564/04 or foreign courts), attempts are being made at holding these entities liable for the lawless character of the content, to which a link is provided. It is particularly controversial if and to what extent these parties have the duty to monitor website content. These attempts significantly increase the risk of engaging in such an activity, all the more so that at present these entities cannot call upon a general lack of duty to monitor (Article 15).

To render online enforcement of defamation and copyright law efficient, the liability of both individuals and Internet providers needs to be easy to determine and predictable, at least to a certain extent. What is more, it ought to respond to the actual roles played by individual users and Internet service providers.

The Digital Millenium Copyright Act and the E-Commerce Directive constitute attempts at such regulation. “The liability regime of the E-commerce Directive has been largely inspired by the DMCA. However, there

²² *Cisek Rafał* Uwagi o ostatniej nowelizacji ustawy o świadczeniu usług drogą elektroniczną, CBKE e-biuletyn 4/2008

are a few interesting differences between the two instruments. Contrary to the Directive, which treats the issue of liability “horizontally”, the DMCA deals only with liability for copyright infringement”.²³ It is argued, that the horizontal approach is favorable to ISPs in that they do not have to monitor the content of the material published by their customers, whereas if proxy caching were merely an exempted act, a provider might still incur liability for contributory infringement. An alternative for the EU would have been to adopt a vertical approach, where data flowing through ISPs’ systems would be subject to application of different legal liability regimes. An obligation would thus be imposed on ISPs to decode the data and analyze all content before authorizing for posting, which would not only constitute an extremely burdensome obligation but also would have the additional potential of ISPs interfering with freedom of expression. Alike the E-Commerce Directive, the DMCA does not tackle the matter in the context of substantive law. All it does is to establish negative standards for the liability of online intermediaries. Since the regulations have the exempting effect on both direct and indirect (contributory) liability of providers, the approach is generally considered to favor them..

According to the procedures for “notice and take down”. The DMCA stipulates, a hosting service provider must take down and remove material upon receiving a notification of infringement. A cached copy must also be subject to removal on notification, but only after the material has been made inaccessible at the originating site. On the contrary, the E-Commerce Directive does not establish a similar condition to exclude liability. It lacks a defined notice and take down procedure and thus shifts censorship authority onto ISPs, in the sense that to avoid liability they may opt to take down a Web page upon receipt of a claim regarding the content on that page. Such a situation might easily pose a threat to freedom of expression. The regulations may favor unfair competition, with companies engaging in a form of “commercial war” in cyberspace, or lobbying bad faith claims against their competitor's Web content.²⁴ Moreover, in order to grant all parties complete protection, a “put back procedure” should be initiated. It would certainly give the owners of Web sites that allegedly contain unlawful materials the possibility to exercise a defense strategy and counteract unwarranted blocking or removal of their content. Finally, liability must be imposed also upon

²³ Hugenholtz, P.B. 1999, Copyright aspects of caching- Digital Intellectual Property Practice Economic Report (Dipper Report), pp. 491.

²⁴ Baistrocchi, P.A, 2002, 'Liability of Intermediary Service Providers in the EU Directive on Electronic Commerce' Santa Clara Computer & High Technology Law Journal.

persons who issue false or unfounded notices in a deliberate fashion, with the view of content removal.

Contrary to the DMCA, the Directive is relatively superficial with regard to the liability of ISPs. Some of their important practices have escaped regulation. Examples of these include activity of an ISP as a provider of information location tools or the exclusion from liability of university staff.

The American DMCA stipulates a liability limitation for the Information Location Tools Providers, which is subject to the following conditions:

- lack of the requisite level of knowledge on the part of the provider concerning the infringing character of the material,
- no financial benefit whatsoever for the provider, which is directly attributable to the infringing activity,
- expeditious take down or blocking access to the allegedly infringing material by the provider upon receiving notification in its due form.

The second category of providers whose position is specifically regulated by the DMCA but not under the E-Commerce Directive is that of non-profit institutions of higher education who act as online intermediaries. Introducing the above mentioned provision resulted from the acknowledgement of the fact that, due to academic freedom, the relationship between a university and its faculty members differs from an “ordinary” employer – employee relationship. To prevent a university from being held liable for the actions of its employees under the principle of *respondeat superior*, the wrongful act of a faculty member will not be considered an act of the educational institution and the knowledge or awareness of an employee will not be attributed to the university.

The above-mentioned loopholes in the EU solutions will need to be closed within the framework of future legislation.

Despite the shortcomings of the existing acts, there have brought about much improvement in copyright as well as its adjustment to the swift changes in the way information society works. Regulations such as the US DMCA and the EU E-Commerce Directive are definite milestones and huge steps ahead since they aim at establishing rules for the activity of e-services providers. By attempting at drawing a clear line between legally acceptable and blatantly illegal acts, they stand a high chance of rooting out Internet anarchy and setting up a basis for the development of e-services.

Another issue to be tackled in the future is the question of control over the content of materials that are sent, stored and made available on the Internet. In particular, the gradual extension of the involvement of service providers in how these activities are carried out. Software for filtering data

on the Internet has already achieved a high degree of effectiveness, thus making ever more possible what was unimaginable only a few years ago.

Developments in the recent years have shown that the course of technological revolution is to a very large extent difficult to foresee. Therefore, we do not know what possibilities service providers will have in the future and what challenges law-makers will have to face. Hence, the issue of the liability of service providers is likely to stay on the agenda for many years to come.