Copyright Issues in the European Union – Towards a science- and education-friendly copyright

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submitted for publication to an OA-journal – in reviewing status (05032013)

Abstract

This report concentrates on EU copyright regulation since 2001, in particular as far as science, education and memory institutions such as libraries are concerned. The copyright law of the European Union cannot be seen independently from international law and context (Berne Convention, WIPO, TRIPS). Member states´ copyright in the EU is strongly based on the author's right tradition (droit d´auteur); it does not have a general underlying principle such as the American-style ´fair use`. Therefore, the interest of the public, including the interest of science, education and the libraries, in using published information objects is only taken into account in the EU by explicitly and narrowly specified limitations and exceptions from the author´s exclusive rights (under the control of the three-step test). Since 2000 the EU has passed many Green Papers and Directives concerning copyright law. Directives are obligatory for the member states to transfer into national law. The most important and influential legislative act of the EU concerning copyright is the Directive 2001/29/EC which, among other things, defines an optional, but exhaustive set of limitations. In the last few years the EU Commission has become increasingly aware that Europe's copyright laws are outdated and have become more a disabling rather than an enabling instrument. Consequently, there have been some remarkable attempts to overcome the European copyright blockade. A new copyright balance in the EU is particularly needed with respect to science, education and to intermediary institutions such as libraries, archives, museums, and other organizations acting in the public interest. For this reason ENCES, the European Network for Copyright in support of Education and Science, proposed a unified copyright regulation for the use of published works in science and education in 2012.The development of a fair, balanced copyright will remain one of the major challenges to modern society. Unrestricted access to published knowledge is the basis for invention in science, for a high-quality educational system on all levels and not least for an innovative industry and for the democratic participation of everyone in all aspects of public and political life.

1 Introduction - Institutional background for copyright regulation in the EU

As of 2007 there are 27 member states in the European Union (EU). Copyright is within the legislative power of the respective state. But, being members of a union of European nations, the states´ national legislative power depends increasingly on statutory provisions of the EU. Unlike the United States, the EU is not a federal state. It is not officially a federation, but in reality a system of intergovernmentalism, in addition to and above national governance. The EU is in many respects something like a European super- or meta-state.

The real, or at least strategic, copyright power lies in the EU, more concretely in the European Parliament (whose President is currently, 2013, Martin Schulz) (REF01), the European Council (President Herman Van Rompuy) (REF02) and the European Commission (President José Manuel Barroso) (REF03). While the *European Council* (consisting of the Heads of State or Government of

the Member States) does not exercise legislative functions but defines general political directions and priorities, the institutional balance is maintained by upholding the *Commission*'s so-called monopoly of initiative.

According to the Treaty of Lisbon (REF04), the *European Parliament* does not have the power to initiate legislation (only indirectly by requesting a legislative proposal from the Commission). But regardless of the lack of formal legislative initiative competence, the Parliament is often very influential in shaping European (and sometimes international) policies, such as recently (in 2012) by rejecting ACTA (Anti-Counterfeiting Trade Agreement). And last but not least, the Parliament, together with the Council, is in charge of passing EU laws and directives, such as it did with the still most influential *Copyright Directive* of 2001 (see below) (REF05).

2 EU copyright in the international context

All EU states are signatories of international Conventions and Treaties such as the Berne Convention for the Protection of Literary and Artistic Works (REF06) and TRIPS (Trade-Related aspects of Intellectual Property Rights) (REF07) of the WTO (World Trade Organization), and the EU represents its member states in the debates of WIPO (Intellectual Property Organization – REF08), in particular, with respect to copyright issues, in the WIPO Standing Committee on Copyright and Related Rights (SCCR) (REF09). Copyright reform in the EU since 2000 has therefore been highly influenced by the WIPO Copyright Treaty (REF10) and the Performance and Phonogram Treaty (REF11) from December 1996 and even more, because of its binding character for all WTO members, by TRIPS/WTO.

Therefore the copyright law of the European Union cannot be seen independently from international law. It protects the same exploitation (economic) rights for authors, performers, producers of phonograms and films and broadcasting organizations, such as, among others, the right of reproduction, the right of distribution, the right of rental and/or lending, the right of communication to the public (the right to make works publicly online available). These are exclusive rights of the right holders.

Many EU member states´ copyright is strongly based on the author's right tradition (droit d´auteur). In this context, the personal or moral rights of the creators of copyright-protected works, primarily recognized in France and Germany in the 18th and 19th century and later enshrined in the Berne Convention, play a more important role in the EU than they do in the copyright laws of many other states, for example in the United States. The moral rights refer to the right of recognition and attribution of authorship and to the right of integrity – protecting the reputation of the author by preventing others from modifying or distorting the creator´s work without his or her permission. Moral rights cannot be assigned to other people. This is different with (commercial) exploitation rights, which can be contractually transferred to rights of use for others, such as publishers. Most

countries in the EU restrict the duration of moral rights according to the duration time of exploitation rights (life time and, since 2006, seventy years after the creator´s death), whereas some countries (notably France) provide moral rights forever, in other words: perpetually. Moral rights have not been subject to harmonization efforts by the EU-Commission.

The interest of the public, including the interest of science, education and cultural institutions or intermediaries such as libraries, in using published information objects can only be taken into account by explicitly and narrowly specified limitations and exceptions from these exclusive rights. These specifications have to obey the conditions of the internationally binding three-step-test: limitations are only accepted as an exception, not as a rule; limitations must not interfere either with the normal exploitation or with the creators´ interests. There is no general principle for the *use* of copyright-protected material comparable to the ´fair use` principle in the US, at least not in most states on the continent and consequently not on the EU level. It is still controversial whether such an American-style ´fair use` principle would be an appropriate means for achieving a measure of flexibility in the copyright system without losing predictability and legal security and without immoderately impairing authors´ rights.

The majority of copyright experts in the EU believe that the introduction of a new general principle such as the ´fair use` one is not needed (cf. Hugenholtz/Senftleben – REF13, see also REF54) and also not realistic (Hargreaves - REF17, 5.12-5.19). Rather they believe that the tradition of limitations and exceptions leaves room enough for making European copyright more flexible and adaptable to new challenges, mainly caused by the development of information and communication technology but also by a change in moral behavior towards intellectual property and the use of knowledge and information. However, the still binding 2001 EU InfoSoc Directive (see Sect. 3.1) with its exhaustive set of limitations has proven to be a major barrier to a modern and flexible copyright. This is particularly true for the rapidly changing situation in science and education, heavily influenced by the advent of new information and communication technologies and, consequently, by new ways of producing, publishing, analyzing, and using knowledge and information.

Therefore, it is obvious that one of the major challenges facing the copyright system in the EU, but also world-wide, is to improve the systems of limitations and exceptions, either by developing a global approach to limitations and exceptions (Hugenholtz/Okediji 2008 - REF15; Lepage 2003 - REF16) or by taking advantage of the still existing policy space of the legal framework in the EU. The above-mentioned 2011 study by Hugenholtz/Senftleben (REF13) examines “whether flexibilities at the national level can co-exist with the European and international acquis”, despite the fact that “exceptions are enumerated in an exhaustive fashion, and the law of copyright does not provide for an overriding rule of fairness.” Even the 2011 Hargreaves Review in the United Kingdom comes to the conclusion that the implementation of fair use in the European copyright system is “unlikely to be legally feasible in Europe” (REF17) and rather argued “for an additional exception, designed to

enable EU copyright law to accommodate future technological change where it does not threaten copyright owners." Carefully adapting the European copyright system to new challenges rather than radically changing the whole system seems to be the dominant policy in the EU (see Sect. 4).

Part of this adaptation process involves overcoming the rigid interpretation of the three-step test by law-makers and courts of law and aiming for a more liberal and flexible interpretation of its objectives. The development of a user-, innovation-, science- and education-friendly copyright depends crucially on a balanced liberal interpretation of the three-step test. According to a 2008 declaration of leading European copyright experts, "the Three-Step Test does not require limitations and exceptions to be interpreted narrowly. They are to be interpreted according to their objectives and purposes. … In applying the Three-Step Test, account should be taken of the interests of original right holders, as well as of those of subsequent right holders. The Three-Step Test should be interpreted in a manner that respects the legitimate interests of third parties, including interests deriving from human rights and fundamental freedoms; interests in competition, notably on secondary markets; and other public interests, notably in scientific progress and cultural, social, or economic development." (REF18)

3 Green Papers and Directives - Instruments for the regulation and harmonization of EU copyright

The main (and official) source for free access to European Union law and other publicly available documents is EUR-Lex (REF19). The website is available in all 23 official languages of the European Union. The Official Journal of the EU is the "principal source of EUR-Lex content and it is published in the early morning after every working day". With respect to the topic of this article, the most relevant documents can be found (i) in the Information Society Section (REF20) (for instance, documents about the EU Digital Strategy - I2010 Strategy and eEurope Action Plans and Programmes (REF21)) and (ii) in the Data protection, copyright and related rights Section (REF22).

The instruments for regulation and harmonization in the EU are typically directives, but also, increasingly, decisions by the Court of Justice of the European Union (REF23). The debate over new directives is often initiated by Green Papers, for instance the "European Commission Green Paper of 27 July 1995 on Copyright and Related Rights in the Information Society. COM(95) 382 final" (REF24) which led six years later to the Directive 2001/29/EC (see Sect. 3.1). The following directives are of particular relevance for the topic of this paper:

- Directive 96/9/EC of the European Parliament and the Council of 11 March 1996 on the legal protection of databases (REF25) - intended to give "copyright protection for the intellectual creation involved in the selection and arrangement of materials" and "*sui generis* protection for an investment (financial and in terms of human resources, effort and energy) in the obtaining, verification or presentation of the contents of a database". (REF25)

- Directive 2001/29/EC 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" (REF05) (see Sect. 3.1)
- Directive 2004/48/EC of the European Parliament and of the Council of 29 April 2004 on the enforcement of intellectual property rights: "without effective means of enforcing intellectual property rights, innovation and creativity are discouraged and investment diminished." (REF12)
- Directive 2006/116/EC of the European Parliament and of the Council of 12 December 2006 on the term of protection of copyright and certain related rights - "to make terms of protection identical throughout the Community". Since then, the duration of authors´ rights "shall run for the life of the author and for 70 years after his death, irrespective of the date when the work is lawfully made available to the public." (REF26)
- Directive 2012/28/EU of 25 October 2012 on certain permitted uses of orphan works (REF27) (see Sect. 0)

3.1 Directive 2001/29/ InfoSoc Directive

The most prominent and most relevant directive to library and information science, which is still valid, is the Directive 2001/29/, also known as the Information Society Directive or the InfoSoc Directive (REF05). Like all other directives, the InfoSoc Directive is not immediately applicable in Member States' internal law after its entry into force but constitutes an obligation on each state to implement the directive in national law, normally within a time limit of 18 months. Thus, the Directive was due to be implemented by all EU member states by 22nd December 2002. Only few member states met the deadline (Denmark and Greece). For instance, the UK amended its Copyright, Designs and Patents Act from 1988 on 31st October 2003, Germany in Sept 2003, Italy and Austria also in 2003 and other countries even later, France for instance in 2006 (cf. (REF28; cf. Lucie Guibault et al. 2007 - REF29). The EU can enforce the implementation by bringing a case against states which have not transposed directives adequately and/or in a timely fashion before the European Court of Justice.

The main characteristics of the InfoSoc Directive:

- The InfoSoc Directive aims at responding "adequately to economic realities such as new forms of exploitation". It holds a high level of protection as crucial to intellectual creativity and to investments in market products: "A rigorous, effective system for the protection of copyright and related rights is one of the main ways of ensuring that European cultural creativity and production receive the necessary resources and of safeguarding the independence and dignity of artistic creators and performers." (no. 11)

- The InfoSoc Directive does not cover the legal protection of computer programs and does not apply to the Directive 96/9/EC on the legal protection of databases (REF25).
- Exclusive rights are granted with respect to the “reproduction right” (Art. 2), the “distribution right” (Art. 4) and for the new right (introduced by WIPO 1996 – REF10) of "communication to the public" or "making available to the public" (Article 3), particularly for publication and transmission on the Internet.
- The InfoSoc Directive provides Member States with an exhaustive set of exceptions or limitations (cf. Art. 5, para 2 and 3) which they may or may not embed into their national law (without having the right to establish a new limitation which is not part of the exhaustive EU set of limitations).
- Besides the exceptions to the distribution right (Art. 5 para 4), there are five exceptions or limitations to the reproduction right (cf. Art. 5, para 2) – of which (c) is in particular relevant in this context: “in respect of specific acts of reproduction made by publicly accessible libraries, educational establishments or museums, or by archives, which are not for direct or indirect economic or commercial advantage”.
- There are fifteen exceptions or limitations to the reproduction right and to the right of communication to the public (cf. Art. 5, para 3) – of which (a) and (n) are in particular relevant in this context: “(a) use for the sole purpose of illustration for teaching or scientific research, as long as the source, including the author's name, is indicated, unless this turns out to be impossible and to the extent justified by the non-commercial purpose to be achieved” and “(n) use by communication or making available, for the purpose of research or private study, to individual members of the public by dedicated terminals on the premises of establishments referred to in paragraph 2 (c) [these are “publicly accessible libraries, educational establishments or museums, or by archives, which are not for direct or indirect economic or commercial advantage” – RK] of works and other subject-matter not subject to purchase or licensing terms which are contained in their collections”.
- The InfoSoc Directive, following TRIPS, saw the “need to provide for harmonized legal protection against circumvention of effective technological measures and against provision of devices and products or services to this effect.” (no. 47).

Although a directive in general is supposed to contribute to harmonizing processes in the EU, the InfoSoc Directive leaves significant freedom for the transposition of EU specifications into national law. As a consequence, member states´ copyright laws are far from being compatible, let alone from having a common set of exceptions.

3.2 The influence of EU copyright on national law-making and jurisdiction – an example from Germany

The influence which EU copyright regulation has not only on the development of respective national laws but also on national jurisdiction cannot be underestimated. Here is one example: As of fall 2012, the Federal Supreme Court (Bundesgerichtshof – BGH) in Germany had to rule on a rather controversial case which had been ruled on differently first by the District Court (Landgericht - LG) in Frankfurt/Main and then by the Higher Regional Appeal Court (Oberlandesgericht - OLG), also in Frankfurt/Main: The German publishing company Ulmer had instituted legal proceedings against the University and Country Library of the Technical University of Darmstadt because Ulmer claimed that the University had overstretched the validity of § 52b of the German Copyright Law (UrhG) (REF30) by not only having digitized a textbook (of which it had seven printed copies in its stock) but also by allowing access to the chapters of this textbook to students (not remotely but on special electronic terminals on the premises of the library only). In addition, and this was particularly the subject of Ulmer´s complaint, the library had allowed students to print what they found relevant on the screen and/or to store the texts on USB sticks.

§ 52b was introduced to German Copyright Law in 2003 as a consequence of the InfoSoc Directive 2001 (REF30). The German government and parliament (Bundestag) had decided to follow Art 5, 3, n of the Directive: "use by communication or making available, for the purpose of research or private study, to individual members of the public by dedicated terminals on the premises of establishments referred to in paragraph 2(c) of works and other subject-matter not subject to purchase or licensing terms which are contained in their collections".

Interestingly and with some fatal consequences, German law-makers had translated the EU term "dedicated terminals" into "Leseplätze" (reading desks). This, among other peculiarities in § 52b, has produced some uncertainty about what is permitted and what is not. Taking the term "Leseplatz" literally, users are only allowed to read, not to print or to save the texts on external devices. The courts in Frankfurt could not agree on a common interpretation of the law and, of course, both plaintiff and defendant in the lawsuit did not accept their decisions and therefore the Federal Supreme Court was asked to judicate. But the Court decided not make use of its final decision power (in Germany) to rule on this issue: "the real exciting problems in copyright cannot be decided on by us, the judges in Supreme Court" (Judge Bornkamp of the BGH). Instead the Court shifted the responsibility to the Court of Justice of the European Union (CJEU) by asking it three questions:

(1) Can (the above mentioned) Art 5, 3, n of the InfoSoc Directive be applied when the rights owner (the publisher) offers a contractual licensing agreement under acceptable conditions to the library?
(2) Are national lawmakers authorized to provide libraries the right to digitize printed works which they have in their stocks and to make the digitized objects electronically accessible?

(3) Are national lawmakers authorized to provide libraries the right of allowing users to make copies of the electronic material for further use either by printing them or by storing them on external devices?

The delegation of problematic issues to the Court of Justice of the European Union happens more and more (not only in copyright cases) and indicates that the federal jurisdiction of the Member States is shifting to the jurisdiction of the European Court, and, as a consequence, the national legislation to the EU legislation.

4 Overcoming European copyright blockade

Within the *Commission*, responsibility for copyright issues has to be shared between at least three EU Commissioners, those for the Internal Market and Services/Justice, Freedom & Security (whose Commissioner is currently Michel Barnier), for the Competition/Digital Agenda (Commissioner Neelie Kroes), and for Health, Education, Culture, Multilingualism and Youth (Androulla Vassiliou). This split in competence and power makes it difficult to arrive at a common European copyright strategy. But without playing the differences down, there is an increasingly common belief - not only among the three Commissioners - that Europe's copyright laws are outdated, especially from a scientific point of view. The influential Institute for Information Law (Amsterdam) demanded already in 2006 a “Recasting of Copyright & Related Rights for the Knowledge Economy”. (REF14)

4.1 Digital Agenda and Copyright in the Knowledge Economy

The copyright deficit clearly calls for action. Consequently, copyright reform is part of the Digital Agenda for Europe (part of the EU strategy Europe 2020) (REF31) which “aims to reboot Europe's economy and help Europe's citizens and businesses to get the most out of digital technologies.” Among the seven key areas of the Digital Agenda is “5. Update EU's Copyright Framework”. The three EU Commissioners involved plan to make the Agenda more concrete by creating a dialogue with the relevant stakeholders in 2013. Among the central objectives are “to foster cross-border on-line access and "portability" of content across borders”, “to foster transparency and ensure that end-users have greater clarity on uses of protected material”, “to promote efficient TDM [Text and Data Mining] for scientific research purposes”. (REF32) And in 2014, the Commission, based on market studies, impact assessment and legal drafting work, intends to decide whether to start revising the current copyright legislation. In addition, in 2013 the EU will carry out a survey “Civil enforcement of intellectual property rights: public consultation on the efficiency of proceedings and accessibility of measures” (significantly, “enforcement” of IPR is the focal point of the survey, not IPR itself) and encourage “all citizens, companies and organizations, including national governments and other public authorities … to respond to this consultation.” (REF32). Bringing all these initiatives together may has the potential to transform the European state-oriented copyright arena into a more centralized one under the responsibility of the EU (see the end of Sect. 6).

4.2 Some evidence for progress in European copyright

Actually, there is already some evidence for progress in the development of a European copyright regulation which is more appropriate to the electronic environment. The "European Commission Green Paper of 16 July 2008 on Copyright in the Knowledge Economy. COM(2008) 466 final" (REF33) could be seen as a first step to this direction. In this paper there are also some questions (19-23) concerning science and education:

> (19) Should the scientific and research community enter into licensing schemes with publishers in order to increase access to works for teaching or research purposes?
> (20) Should the teaching and research exception be clarified so as to accommodate modern forms of distance learning?
> (21) Should there be a clarification that the teaching and research exception covers not only material used in classrooms or educational facilities, but also use of works at home for study?
> (22) Should there be mandatory minimum rules as to the length of the excerpts from works which can be reproduced or made available for teaching and research purposes?
> (23)) Should there be a mandatory minimum requirement that the exception covers both teaching and research?

The public debate (372 responses) over this Green Paper led to the "Communication from the Commission of 19 October 2009 - Copyright in the Knowledge Economy COM(2009) 532 final" (REF34) – with the objective "to adapt the legal framework for copyright to recent technological developments. This 2009 Communication therefore examines possible avenues for future action concerning the digitization of works, the processing of orphan works, access for persons with disabilities and the protection of new creators of online content." (REF34).

Significantly, this 2009 Communication from the Commission speaks of "copyright in the knowledge economy", not of "knowledge society" in general, as the UNESCO prefers to do (REF35). Nevertheless, there are some remarks in the Communication which are not driven by direct commercial interest but may lead to a new copyright and perhaps even to a special copyright for science and education:

"An issue that has come to the fore is a possible difference between scientific publishing and publishing for literary and artistic aims. While scientific and scholarly authors have other sources of income and publish to further the cause of research and scholarship, literary authors (such as novelists) need to earn a living from the publication of their works. In order to avoid needless duplication of research, published results of publicly-funded research should be available to the entire scientific community and even to the public. This is because all research builds on previous research. In these circumstances, open-access publishing and open repositories for published articles offer solutions." (3.3 in this Communication – REF34)

4.3 Action towards open access

As a next step the Commission, taking into account the advent of the Internet and its possibilities for borderless dissemination of knowledge and science, is willing "to already take concrete action in relation to open access to publicly funded research results." (3.4 in this Communication – REF34). Since then, in a 07/2012 Communication "Towards better access to scientific information: Boosting the benefits of public investments in research" (REF36), this step has been taken - not least because the Commission recognizes the positive economic effect of open access, namely that "open access to research results will boost Europe's innovation capacity" and "give citizens quicker access to the benefits of scientific discoveries."

"In this way, it will give Europe a better return on its €87 billion annual investment in R&D. … As a first step, the Commission will make open access to scientific publications a general principle of Horizon 2020, the EU's Research & Innovation funding programme for 2014-2020 (REF37). As of 2014, all articles produced with funding from Horizon 2020 will have to be accessible:

- articles will either immediately be made accessible online by the publisher ('Gold' open access) - up-front publication costs can be eligible for reimbursement by the European Commission; or
- researchers will make their articles available through an open access repository no later than six months (twelve months for articles in the fields of social sciences and humanities) after publication ('Green' open access).

The Commission has also recommended that Member States take a similar approach to the results of research funded under their own domestic programmes. The goal is for 60% of European publicly-funded research articles to be available under open access by 2016." (REF38)

Since then there has been an intensive debate in many EU member states over to what extent and by which means these objectives can be achieved, for instance seeking answers to questions such as the following ones:

- Should a right be enshrined in copyright law that gives authors the right for a second (non-commercial) exploitation/publication (legally speaking, in form of a communication to the public), in addition to the first commercial one?
- What is an appropriate and acceptable embargo time (the delay between first and second publication)?
- In which format should the second publication be made available (the publisher´s or the final author´s format)?
- Should this (second publication) right of the authors be combined with an institutional mandate which allows the institution of the authors (or other non-commercial institutions) to make their work freely available publicly in open access repositories?

Also on the EU level, the European Parliament, the Commission and the Council are still negotiating the final legislative text of the "Rules of Participation" for Horizon 2020 (REF55). There is obviously pressure from the industry, primarily by publishers and BUSINESSEUROPE (REF56), pushing for the removal of "mandatory open access", questioning the promotion of "open data" in Horizon 2020, and claiming that licenses practices are more efficient than new legally binding copyright exceptions and limitations.

4.4 A European solution for orphan works in sight

The avenues for future action (finally culminating in directives) should clarify and actually support the work of the European Digital Library, Europeana (REF39), "the legal implications of mass-scale digitization and providing solutions to the issue of transaction costs for right clearance". This includes the task of defining a legal base for digitizing orphan works and making them available to the public. And here there has actually been real progress: After a long debate, which began with the "Commission Recommendation 2006/585/EC of 24 August 2006 on the digitization and online accessibility of cultural material and digital preservation" (REF40), the European Parliament and the Council finally agreed on the Directive 2012/28/EU of 25 October 2012 on certain permitted uses of orphan works. (REF27).

The legal framework of this Directive covers digitization and online cross-border display of orphan works, but only for use in the public interest and by organizations acting in the public interest:

Some details of the Directive 2012/28/EU (all quotations from REF27):

- Article 2 of Directive 2012/28/EU defines orphan works: "A work or a phonogram shall be considered an orphan work if none of the right holders in that work or phonogram is identified or, even if one or more of them is identified, none is located despite a diligent search for the right holders having been carried out and recorded…".
- Article 3 demands that "a diligent search is carried out in good faith in respect of each work or other protected subject-matter, by consulting the appropriate sources for the category of works and other protected subject-matter in question. The diligent search shall be carried out prior to the use of the work or phonogram."
- The Directive primarily intends to support "certain uses made of orphan works by publicly accessible libraries, educational establishments and museums, as well as by archives, film or audio heritage institutions and public-service broadcasting organizations, established in the Member States". (cf. Article 1).
- And, important for the large number of states in the EU, Article 4 guarantees a "mutual recognition of orphan work status". "A work or phonogram which is considered an orphan work according to Article 2 in a Member State shall be considered an orphan work in all

Member States. That work or phonogram may be used and accessed in accordance with this Directive in all Member States."

- The orphan status can be reversed, should a right holder appear and claim their rights and compensation. But because, according to the Directive, the use of orphan works is limited to noncommercial uses, this compensation will not be extensive and thus not prohibitive for organizations such as libraries and they would be freed from future copyright infringement claims.

This piece of legislation can also be seen as a first step to overcome the barrier of the InfoSoc Directive with its exclusive set of exceptions or limitations: "permitted uses of orphan works" can clearly be considered a new exception. The public interest in having access to a huge part of their cultural heritage has been assessed (under certain instances) as more important than protecting the rights of unknown or unidentifiable copyright holders. This can also be interpreted as an indication of a general shift in copyright regulation, namely towards a new balance between public interest (the right to free use of published works) and private interest in commercial exploitation of intellectual works.

4.5 Recent developments in EU Member states - examples from the UK

It is not only the EU (Commission) itself which is trying to overcome the European copyright blockade. For instance, the UK government is increasingly aware of the need for a far-reaching copyright reform - in reaction to some reports and reviews such as

- Ian Hargreaves: Digital Opportunity. A Review of Intellectual Property and Growth (2011) (REF17), followed by
- the Hooper/Lynch Report: Copyright works. Streamlining copyright licensing for the digital age (2012) (REF41) but also
- the older Gowers Review of Intellectual Property (2006) (REF42) and
- the Finch-Report: Accessibility, sustainability, excellence: how to expand access to research publications (2012) (UR43).

These reports, particularly the Hargreaves´ one, were triggered by the government´s assumption "that the current intellectual property framework might not be sufficiently well designed to promote innovation and growth in the UK economy." (REF17). Therefore, the government (in its report "Modernizing copyright …" – REF44) believes "that the copyright framework can be improved to make the UK a better place for consumers and for firms to innovate, in markets which are vital for future growth."

Whereas the UK government clearly continues to promote a strong copyright protection as being vital for the creative sectors, it also acknowledges "that permitting people to make wider use of copyright

works, but with suitable safeguards for rights holders, can make those works more valuable for everyone." Therefore it proposes, among other things,

- to liberalize private copying to a certain extent,
- to "provide access to copyright works over secure networks to support the growing demand for distance learning, and allow use of all media in teaching and education" (although, by default, primarily based on legal licenses);
- to "allow sound recordings, films and broadcasts to be copied for non-commercial research and private study purposes, without permission from the copyright holder. This includes both user copying and library copying"; "educational institutions, libraries, archives and museums will also be permitted to offer access to the same types of copyright works on their premises by electronic means at dedicated terminals."
- "Non-commercial researchers will be allowed to use computers to study published research results and other data without copyright law interfering."
- "Museums, galleries, libraries and archives will be allowed to preserve any type of copyright work that is in their permanent collection and cannot readily be replaced."

5 The need for a comprehensive science- and education-friendly copyright

A new balance in EU copyright is particularly needed with respect to science, education and to intermediary institutions such as libraries, archives, museums, and other memory/cultural organizations acting in the public interest. The view of the three EU Commissioners (mentioned above) that Europe's copyright laws are outdated is in particular true for the situation in science and education (cf. the example in Sect. 3.2).

Aside from the official EU copyright policy, there are some signs that in the near future science and education can be freed from the restrictions of a strong copyright – "strong" in the sense, that the law protects mainly rights holder's interests and in particular commercial exploitation rights. Perhaps there will be a shift in the meaning of "strong" – and in doing so a return to the roots of copyright: a strong copyright then will be not so much a protection of private property but will have the objective "to promote the progress of science and the useful arts" (U.S. Constitution, Article I, Section 8, Clause 8) and intellectual freedom in general. Copyright should be more of an enabling than a disabling regulation tool.

The existing copyright regime is strongly protective of creators´ and publishers´ rights; it allows access to and usage of published knowledge in science and education only through an exhaustive set of limitations and exceptions. As mentioned above, European national copyright regulations do not have the flexibility to introduce new limitations and exceptions but are bound to the exhaustive set of exceptions as mandated in the InfoSoc Directive 2001. Therefore, it has not been possible to react to

new developments in the electronic environment, such as introducing a new limitation for orphan works or for data mining techniques. In addition, all of the limitations and exceptions which have been introduced on respective national levels are strictly controlled by the three-step-test (cf. Art 13 TRIPS/WTO Agreement (REF7). Not only the InfoSoc Directive but also the three-step test "considerably restricts the national legislator's freedom to adopt new solutions to adapt the exception system to the imperatives of the information society." (Geiger 2007 - REF45).

Therefore, the existing legally binding exceptions are of limited advantage for users in science and education and have a predominantly disabling rather than enabling effect both for the development of new knowledge and for innovation in the economy in general.

In addition, most limitations and exceptions, not least due to their complicated language, produce a great deal of confusion, uncertainty, and dissatisfaction on the side of the users. Copyright regulation, in particular with respect to science and education, has not kept stride with the potentials of contemporary information and communication technologies and of the Internet for a more open and unrestricted access to published knowledge.

In order to contribute to overcoming this unsatisfactory situation, ENCES, the European Network for Copyright in support of Education and Science, was founded in 2008 (REF46). ENCES´ basic assumption is that knowledge and information in its digital form should be made available to everyone everywhere at any time and under fair conditions. This is particularly true with respect to science and education, where open and unrestricted access to knowledge and information in its published form is indispensable.

Because it is quite obvious that this access cannot be achieved through the existing complex system of limitations and exceptions, ENCES proposes a unified copyright regulation for the use of published work in science and education. The main objectives of this proposal are as follows:

1. Copying, distributing and making published works available to the public is permitted, without further authorization, for personal and restriction-free use in science and for educational purposes in schools, institutions of higher education (such as universities), and other non-commercial institutions dedicated to education, continuing and professional training.
2. Published works are subject to free use (without authorization and without remuneration) for documentation, preservation, and long-term archiving purposes of non-commercial culture and memory institutions.
3. (Technical) digital rights management tools in information objects are to be used in science and education.

4. In case remuneration is unavoidable (the default should be free use) only flat-fee remuneration (no single-use) should apply and should be provided by public state-owned science and education institutions.
5. Contractual agreements between authors and publishers which rule out objectives 1-4 are invalid.

ENCES´ demands are widely compatible with the proposal for a European Copyright Code (2010), provided by the Wittem Group (established in 2002) (REF47). This code is a result of collaboration between copyright scholars across the European Union concerned with the future development of European copyright law. The aim of the Group and the Code is "to promote transparency and consistency in European copyright law". The main message with respect to the focus on science and education refers to an authorization-free access and use of published material without further restriction (cf. Chap. 5 Limitations, Art. 5.2, b and Art. 5.3. b):

- "*Art. 5.2– Uses for the purpose of freedom of expression and information*

  (2) The following uses for the purpose of freedom of expression and information are permitted without authorization, but only against payment of remuneration and to the extent justified by the purpose of the use: (a) use of single articles for purposes of internal reporting within an organization; (b) use for purposes of scientific research."

- "*Art. 5.3 – Uses permitted to promote social, political and cultural objectives*

  (2) The following uses for the purpose of promoting important social, political and cultural objectives are permitted without authorization, but only against payment of remuneration, and to the extent justified by the purpose of the use: (a) reproduction by a natural person for private use, provided that the source from which the reproduction is made is not an obviously infringing copy; (b) use for educational purposes."

6 Summary and further challenges for a modern European copyright

This report has concentrated on copyright issues in Europe with particular respect to science and education and intermediary (memory) institutions such as libraries. It can be said that the rigid and exhaustive set of limitations and exceptions, combined with a strong interpretation of the three-step test, is a major obstacle both for a modern copyright in Europe in general, one which can cope with the challenges of modern information and communication technologies for all parts of society and for a science- and education-friendly copyright which gives equal protection to the interests of the authors and those of the users (who in science are mostly authors, too). Such a copyright should also be an enabling tool for innovation in industry and should leave enough room for the information/publishing industry and its commercial interest.

Politics in Europe, for a long time reacting supportively with strong copyright regulation to the intensive lobbying of the copyright industries (REF51), seems increasingly convinced that a more liberal and flexible copyright is in the long turn also in the interest of the economy. Copyright should no longer be a means to protect obsolete business models for the publishing industry but encourages the development of innovative business models which are appropriate to the electronic environment (REF52).

It is only right that the EU is on its way to accepting and fostering open access publishing, in particular for knowledge or rather for published information objects which have been produced through the support of public money (REF48-49, REF36-38).

This seems to be the general strategy in many EU member states, too. The UK, for instance (Government and Research Councils), decided to follow the advice of the Finch Report (REF43, REF50) to support both the golden and the green OA approach, but without providing science and education institutions or libraries with additional financial means. Rather the government recommended shifting the existing budgets in favor of OA publishing (REF44). No wonder that the publishing industry has embraced the UK government´s plan for supporting the golden OA approach - but, of course, the publishing industry was not so excited about similar support for the green OA road. Indeed, accepting the OA publishing approach seems to be the only way of keeping the publishing industry in the information markets for science and information. But it also presents a real challenge or even a danger for intermediary institutions such as libraries, because financial means will be increasingly shifted to the commercial OA publishing industry – with the positive effect of making published works freely available world-wide, but with the negative effect of weakening the public function and performance of libraries.

One is tempted argue that in the future there will no longer be a need for copyright regulation in science and education when all published works (or at least all publicly financed published works) are freely available under the OA paradigm; but this development may well reinforce copyright regulation of the moral rights of the authors, in order to protect their rights against plagiarism and vandalism, particularly in the electronic environment. In addition, it cannot be ignored that the vast majority of works produced and published in the past is still under the control of commercial exploiters or is protected by rights of the original rights-holders.

A fair, balanced copyright will remain one of the major challenges to contemporary society. This is obvious for information markets of the general public, for instance for the use and the protection of music, videos and games (both of producers and exploiters). But it is also true for the domains of science and education. Unrestricted access to published knowledge is the basis for invention in science, for a high-quality educational system on all levels and not least for innovative industry and for the democratic, enlightened participation of everyone in all aspects of public and political life.

The following final list will provide some open questions and challenges to an education- and science-friendly copyright

- The objective of a science- and education-friendly copyright still needs to be pursued.
- The existing exceptions and limitations for memory institutions need to be redefined and should leave freedom to these institutions to provide the public with free access to the existing and published knowledge of the world.
- The long-lasting debate over mandating open access publishing must find a broad consensus, in particular guaranteeing an institutional mandate which provides the authors´ institutions with a second publishing right (in addition to the right of the authors to publish their work in a medium of their own choice).
- The EU has provided the member states with a directive for the use of orphan works. It is up to the national governments and parliaments in the EU to transfer it to the respective national laws and thus pave the way towards a real, digital, comprehensive European library, as intended with Europeana. Mass digitization and dissemination of orphan works and out-of-print works is necessary in order to facilitate access to Europe's cultural heritage.
- The remuneration problem for the use of commercial published work in science and education needs to be solved. Should there be a cultural flat-rate or a special library rate or should every single use be remunerated, as the publishing industry demands? In this context, the EU believes that the role of collecting societies needs to be redefined (REF53).
- User-generated content is increasingly a challenge to copyright, in particular allowing creative transformative use of copyright-protected works which, according to the Gowers Reviews from 2006, "enables creators to rework material for a new purpose or with a new meaning" (REF42). This is one of many examples for the necessity of amending Directive 2001/29/EC to allow new exceptions because of a rapidly changing electronic environment (another is the need for a new exception in favor of text and data mining in science).
- There is a special political challenge to react appropriately to plans (prominent in Germany) to introduce a new ancillary copyright protection for newspaper publishers, which may threaten the free flow of information to media information by making the work of search engines and social media services in the media field more costly or even impossible.

To overcome these problems, there needs to be a far-reaching debate in the EU in the near future, over whether the whole system of national copyright competence should be shifted towards an all-embracing European copyright law, not only for harmonizing reasons, but also, and mainly, for making Europe´s industry, science, and educational sector more competitive internationally. Copyright needs to redefine its objectives in a rapidly changing environment, in particular to find appropriate compromises between legally guaranteed authors´ and users´ rights and the increasingly frequent practice of contractual licensing agreements, which often threaten to override the rights

enshrined in copyright law. Finally, a new European copyright law may want to consider introducing a general flexible principle for the use of publicly available information objects, comparable to the US-American fair use (REF54), without weakening the moral rights of authors.

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