# Intellectual property on the Internet

Section A: Digital copyright

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# 5.1 The need for international copyright harmonisation to protect intellectual property on the Internet

#### 5.1.1 The need for international law reforms

The 1990s saw the popular emergence of the Internet with exponential growth in the number of users. Between 1990 and 2002, Internet users grew from three million people located mainly in the US and Western Europe to 661 million users around the world – 224 times the number. The Internet during this period also grew from a scientific and social network to a commercial one where business models were constructed on the new ways to deliver content to end users. The structure and pricing of the Internet and its access also improved with the emergence of untimed, flat-rate internet service provision and new fibre-optic technologies that permit the throughput of vast amounts of data of numerous types at high speed.

This caused concern for content producers. Broadband Internet meant that complete movies could be copied quickly over the Internet, in contrast to dial-up access. Concern was further provoked by the fact that at the same time as this exponential growth of the Internet (and maybe causing it), we witnessed the emergence of low-cost technologies such as computers with large amounts of processing power and storage, digital recorders for most kinds of works and sophisticated but easy-to-use software programs that permit the ready manipulation and storage of the content transmitted over the high-speed broadband. This made high-quality (remember those perfect 'copies') copying of digital media inexpensive, quick, global and easy to make and distribute. The huge numbers of people on the Internet were all potential copyright infringers. At the same time the ability to enforce copyright to combat this was perceived as difficult because of:

the difficulty of knowing at many times where things occur on the Internet, although this is getting to be less of a problem with refined geographical location tools emerging the distributive nature of this network of networks

the distributive flature of this fletwork of fletworks

the cross-network technological operation of the Internet without regard to national boundaries or jurisdictions

the lack of certainty as to how the Internet fits within the traditional application of laws based on physical location

the seeming anonymity of the Internet, which created difficulty in detecting individual infringers whose identity might not be known or who could hide in a series of servers that might be based in other countries and controlled by others who may not even be aware of the infringement

the ability of mirror sites to be set up quickly with infringing content

the 'historical' (in relative terms) culture of the Internet that information and technologies were shared in building it, which still colours the attitude of many creators of works who may wish to make their works freely available on the Internet in what is called open source

the operation of the Internet itself, relying on the making of copies in transmitting and caching data by the networks and ISPs and the operation of browsing by users, including the operation of hyperlinking, which causes a copy to be made on the user's machine.

Because of all of these concerns in the face of Internet growth and the sophistication of consumer technologies, the content-producing community around the world pressed for Internet- and digital media-specific reforms to the copyright regime at both the international and national levels. International reforms were seen as critical in order to put in place an international baseline of protections for digital works that could now be made available globally over digital networks of all kinds, under a development that is called 'convergence'. With convergence, theoretically any digital network can carry any digital content, so you have the possibility of having all sorts of digital works (books, newspapers, radio, TV, movies, sound recordings, images and so on) transmitted from anywhere in the world to your digital mobile phone, TV, computer and so on.

These reforms were largely concerned with:

the creation a new right to fit the distribution of works over the Internet

the protection of technological measures to prevent copying of and access to digital works

the enhancement of enforcement schemes.

An international approach was considered necessary to address the scope and scale of the perceived problems, but as far as possible within traditional copyright. It was the view of a significant number of copyright experts that the protections accorded under the primary treaty within the existing international framework for copyright, the Berne Convention, might not adequately provide for the protection of Internet works, as its terms had been construed.

The Convention protects the economic rights of authors from Berne Member States to:

reproduce the work in any manner or form

translate the work

adapt, arrange or alter the work

publicly perform (dramatic, musical) or recite (literary) the works and to communicate this performance to the public

broadcast the work by wireless diffusion and cable retransmission of the work

cinematic (audiovisual) adaptation of the work.

As we discussed in the previous chapter and as you have further read in your assigned readings, it was not clear whether the traditional interpretations given to these terms over the years would stretch to accommodate works on the Internet. It was thought that a separate new right to 'make works available' on the Internet was needed.

This was perhaps a matter of undue concern, especially with the seemingly broad wording of the reproduction right. For example, the United States has yet to incorporate a specific protection and, as

#### The new WIPO treaties

Two new treaties are administered by WIPO, a specialist UN organisation headquartered in Switzerland: the WIPO Copyright Treaty (WCT) and the WIPO Performers and Producers Rights Treaty (WPPT) of 1996. These are the two primary international treaties intended to address the specific fit of copyright and related rights to the Internet. These WIPO treaties were agreed after the adoption of the TRIPS accord under the auspices of the WTO, in order to address those problems not dealt with by TRIPS. Work on the new copyright and related rights standards, already underway, was intensified.

The two treaties effect the changes discussed above by layering the new provisions over the major existing WIPO treaties on copyright and related rights – the Berne and Rome Conventions – in order to respond in particular to developments in technology and in the marketplace. Since the Berne and Rome Conventions were adopted or last revised more than a quarter of a century ago, new types of works, new markets and new methods of use and dissemination have evolved. Among other things, both the WCT and the WPPT address the challenges posed by today's digital technologies, in particular the dissemination of protected material over digital networks such as the Internet. For this reason, they have sometimes been referred to as the 'Internet Treaties'.

Of the two, we will consider the WCT first, but before we do that, we will briefly examine the TRIPS agreement. This did not fully address the digital agenda, but it does have provisions with implications for the Internet, especially in light of its global reach and its incorporation of the Berne rights, which could of themselves be interpreted broadly to encompass reproduction of digital works even where countries have not implemented a specific making available right.

The TRIPS agreement is a key international instrument for the protection of intellectual property, using the international multilateral trade regime as its negotiation and implementation formats. With the accession of China to the WTO, Russia remains the largest non-WTO member although it is pursuing accession actively. TRIPS is also a 'Berne plus' agreement, taking nearly all of the substantive articles of Berne as a starting point and then layering on other requirements. We will briefly examine the copyright provisions of TRIPS. This, of course, means that we will look at Berne, the foundation of both the WCT and TRIPS.

Having considered copyright, this chapter will then explore the international regime governing related rights. Here we will consider the Rome Convention, the WPPT and the TRIPS provisions governing related rights. As we noted in the last chapter, with the ever-expanding use of the Internet to make music, TV and movies available to users, the nature and scope of performer's/ producer's rights is an important topic for practitioners in this field.

Finally, we will examine the implementation of the WIPO Internet treaties in the United States and the European Union through, respectively, the Digital Millennium Copyright Act and the Directive on the Protection of Copyright and Related Rights in an Information Society.

## 5.2 Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS)

#### 5.2.1 General overview

The Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS) is a treaty administered by the World Trade Organization (WTO). It sets minimum standards for many forms of intellectual property rights and their regulation to be provided by each WTO member nation. TRIPS was negotiated as part of the Uruguay Round of negotiations on the General Agreement on Tariffs and Trade (GATT) in 1994. TRIPS applies to all WTO members with effect from 1 January 1995. There are some transitional periods for developing countries: 2016 is the effective date for least-developed countries and there is the possibility of further extension.

#### 5.2.2 Outline of TRIPS framework

Although there are earlier examples of IP rights being addressed in the context of bilateral trade negotiations, it can be said that a key significance of TRIPS is that it introduced intellectual property law into multilateral international trade agreements for the first time. TRIPS can be said to address four specific areas, as follows.

TRIPS provides a **minimum level of substantive rights** that member nations' laws must meet. These include requirements for the following types of intellectual property:

copyright rights, including the rights of performers, producers of sound recordings and broadcasting organisations geographical indications, including appellations of origin industrial designs; integrated circuit layout-designs; patents monopolies for the developers of new plant varieties; trade marks

trade dress

undisclosed or confidential information.

general obligations (e.g. fairness and equity) civil and administrative procedures and remedies (e.g. evidentiary proof, injunctive relief, damages, right of information, indemnification of defendants) special requirements related to border control measures (e.g. notice and duration of suspension, indemnification) criminal procedures (e.g. imprisonment and fines sufficient to be a deterrent).

TRIPS applies the WTO's **dispute resolution procedures** when member nations fail to meet their TRIPS obligations. The WTO Dispute Settlement Body decides complaints only between WTO member nations. Therefore, if a private party has a complaint it must get its government to bring it to the WTO. The dispute settlement procedures provide for a panel of experts to hear the matter and even to impose sanctions on an infringing member, including in other areas of trade. This is seen as one of the key advantages of TRIPS over other IP treaties which rely only on diplomacy and mutual agreement to have effect.

TRIPS also implements for intellectual property protection several **horizontal or general principles**. The following two are found in every trade agreement administered by the WTO:

'National treatment' requires that members to treat the 'nationals' (persons legal and individual) of other member nations the same way they treat their own 'nationals'. (This is the premise of Berne with a requirement of at least the minimum Berne protections in the event that national treatment is below the Berne level.)

'Most favoured nation' requires a member also to give another member any more favorable treatment that it gives to a third nation. The effect of this is that the nationals of your country cannot be treated worse than those of another.

Another horizontal provision specific to TRIPS alone is the application of the Berne 'three-part test' to justify an exception or limitation on intellectual property rights (i.e. only specific cases, not conflicting with normal exploitation of the work and not unreasonably prejudicing the legitimate interests of the rightholder) (Berne, Art. 13).

The TRIPS agreement has provided for a much greater degree of harmonisation internationally with regard to intellectual property rights. It has not been without criticism, however. Some content owners believe that it is still too vague, especially in respect of its enforcement provisions. Others think that it is overbroad, too rigid, favours developed nations (where much of the global content comes from for copyright purposes) and fails to address the needs of less developed nations.

#### 5.2.3 TRIPS and copyright and related rights

As noted, the TRIPS Agreement requires that WTO member countries comply with the substantive obligations of the Berne Convention, with the exception of Art. 6 *bis* (moral rights). Thus, TRIPS incorporates by reference Articles 1–21 of Berne with the noted exception and then layers its additional requirements over that. Berne 'plus' these thus becomes the floor for WTO member

nations' copyright law, which must apply must apply to individuals and companies ('nationals') of all other WTO members, even those not signatories to Berne itself. Thus, to the extent that the Berne Convention right of reproduction, and so on, would be interpreted to encompass reproduction and transmission by wire on the Internet, TRIPs would too.

#### 5.2.4 The Berne Convention: overview

In light of both TRIPS' and the WCT's use of Berne as the foundation of their protections, it is a logical first point of our analysis of the specifics of the minimum international levels of legal protection provided for copyright/author's rights. While individual Berne Union states can provide their own nationals with lower levels of protection under their national copyright laws; Berne:

sets a floor under copyright protections by specifying a minimum level of rights that must be provided by the Berne Union members to other member states' nationals requires its members to provide the same copyright protection that they accord their own nationals plus any additional protections under Berne, if they exist (national treatment).

It is likely, therefore, that most countries in the world apply at least

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cannot infringe copyright in a poem in order to include the work in your poetry anthology or an online database of poems)(Art. 2(3)).

Berne gives members the option whether to assert government copyright in their official texts. The UK, for example, asserts Crown Copyright in these. The US federal government does not, although some US states and local governments do assert copyright, a practice that has been upheld by the courts if not forbidden by that state's law. To the extent that copyright is asserted, there are implications for the reuse of government texts, which are often available online, such as UK legislation from the Office of Public Sector Information (formerly Her Majesty's Stationery Office). See http://www.opsi.gov.uk/, which gives you a specific licence to read or print out the legislation but states that you must contact the Office for a licence to reuse.

Berne works do not include news of the day or miscellaneous facts.

#### What are the qualifications for protection?

The Berne Convention protects the works of Berne authors. These are nationals or residents of Berne countries or authors who publish in a Berne country within 30 days of first publishing in a non-Berne state.

The only other qualification for protection that can be imposed by Berne Union members is a requirement for **fixation in a material form** (e.g. written on paper, recorded on a disk, recorded on film or video, etc.).

#### Who is the beneficiary of the protection under Berne?

The **author and his successors in title** benefit from the protection. Members must determine in their laws who is the 'author' of a cinematographic work. (It could be the director as well as the producer; civil law countries have held the director (the creator of a film's artistic expression) to be an author; common law countries have readily extended the protection to the producer for the skill, judgement and labour involved in getting the movie made.)

#### How does the protection arise?

Under Berne, the protections arise without formalities. A work will be eligible for protection if it is a qualifying work.

#### What protections does the Berne Convention provide? Economic rights

Berne authors enjoy, in Berne Union countries other than their country of origin, the protections that those countries provide their 15w(The) TjBtheir cou1.53.0019 Tw(au)3.1(h)3.2(at p) provide their

#### Moral rights (not included within TRIPS)

The Berne Convention protects, independently of economic rights and even upon transfer of these, the right of the author to:

claim authorship of the work (**right of paternity**) object to any distortion, mutilation or other modification of, or other derogatory action in relation to, the wor which would be

compilations of data or other material which by reason of the selection or arrangement of their contents constitute intellectual creations shall be protected 'as such' (Art. 10.2) commercial rental right in respect of computer programs and cinematographic works (Art. 11).

The first of these harmonises the nature of protectable subject matter. As you will see when we look further at the protection of computer programs in Chapter 7, interfaces between the software and hardware and other elements of its functionality have been considered in the US and under the EU Software Directive not to be protectable expression.

The Berne Convention is also silent on computer programs as a literary work. This TRIPS provision ensures that they are treated as such, including the various forms of code – object code (machine-readable 0s and 1s) or the human-readable source code that reads like a series of weird instructions.<sup>3</sup> Computer software programs operate the Internet and can be sold and distributed over the Internet. This provision ensures that they are protected by copyright in WTO member countries.

The same applies to databases, which are also used extensively in the operation of the Internet (e.g. the IP addressing databases which route traffic) and which comprise many of the information content services available on the Internet. TRIPS requires the protection of compilations of data and other materials where the selection and arrangement meets the test of intellectual creation. This is equivalent to the US standard in *Feist*. It is not equivalent to the EU standard for copyright protection of databases, which requires that they meet the criteria for a database first. However, compilations are protected separately in the UK and need only meet the standard of skill, judgment and labour.

The harmonisation measures on commercial rental of computer programs and movies makes equivalent their treatment with that of other literary works. With the growing capacity to offer movies by streaming over the Internet, this protection throughout WTO countries is significant.

TRIPS did much to bolster the global level of IP protection, but it is not the last word. In the trade-related regime, countries – the United States especially – are pursuing bilateral trade agreements requiring more aggressive protections than TRIPS, called 'TRIPS plus' agreements. It has been noted that the United States is engaged in a systematic effort thus to raise the global level of intellectual property protection one country at a time.<sup>4</sup>

As will be explored in the following section, TRIPS did not address the problems that the Internet was perceived as posing to the existing framework of copyright protection. Since the requirement of unanimity meant that Berne itself was unlikely ever to be amended again, it was seen necessary to develop two new treaties to again serve as wrappers – or 'umbrellas', as they were labelled – to cover any gaps in the protection accorded under Berne. If these were ratified and implemented by many countries as special agreements provided for by Art. 20 of Berne, they could achieve a effect comparable to amending Berne itself.

<sup>&</sup>lt;sup>3</sup> Hint for remembering the difference: Source code can be Spoken; Object code has Os

<sup>&</sup>lt;sup>4</sup> See Scafidi, S. 'The "Good Old Days" of TRIPs: The US Trade Agenda and the Extension of Pharmaceutical Test Data Protection,' 4 Yale J. Health Pol'y L. & Ethics 341, 343 (2004).

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were an issue under copyright law, and makes no explicit reference to 'temporary digital storage.' In addition, the phrase 'storage of a protected work in digital form in an electronic medium' could potentially include temporary digital storage in a node computer during transmission. It is therefore difficult to agree with Commissioner Lehman that the Agreed Statement makes anything 'clear.'

(Hayes, D.L. *Advanced Copyright Issues on the Internet* (San Francisco: Fenwick & West LLP, 2004), pp.11–12.) [Internal citations omitted.]

In connection with the second agenda item, it was felt that a new and separate right was needed to ensure the author's rights in the communication of their works of any kind over digital networks. The WCT creates this. This is the right of authors of artistic or literary works to authorise any communication to the public of their works 'by wire or wireless means, including the making available to the public of their works in such a way that members of the public may access these works from a place and at a time individually chosen by them.' It is referred to as the 'making available right'. Article 6(1) of the WCT provides an exclusive right to authorise the making available to the public of originals and copies of works through sale or other transfer of ownership, that is, an exclusive right of distribution.

As for the exceptions to this right, the Treaty permits contracting states to create exceptions to the making available right subject to the Berne three-part test (Art. 10(1)).

Addressing the third agenda item, the WCT provides that authors have the right to use technological protection measures and electronic rights management information and that member states are to provide adequate and effective measures that prevent their circumvention (bypass) or removal.

Article 11 of the Treaty, 'Obligations concerning Technological Measures', provides:

Contracting Parties shall provide adequate legal protection and effective legal remedies against the circumvention of effective technological measures that are used by authors in connection with the exercise of their rights under this Treaty or the Berne Convention and that restrict acts, in respect of their works, which are not authorized by the authors concerned or permitted by law.

#### As one scholar notes:

The language of the WIPO Copyright Treaty does not require that any implementing language [in any country] go beyond providing remedies against those who actually circumvent protection mechanisms. It does not require the banning of circumvention technology or having the distribution of such technology be a violation. The language also does not require that the implementing language address circumvention to access a work when such circumvention is not an infringement, since control of access to a work is not one of the exclusive rights of a copyright owner [under copyright laws, generally].

(Hollaar, L.A. *Treatise: Legal Protection of Digital Information*, Chapter 3. Available at:

http://digital-law-online.info/lpdi1.0/treatise30.html)

In addition to the technological protection measure provisions, the WCT also contains Article 12, 'Obligations concerning Rights Management Information'. This states:

- (1) Contracting Parties shall provide adequate and effective legal remedies against any person knowingly performing any of the following acts knowing, or with respect to civil remedies having reasonable grounds to know, that it will induce, enable, facilitate or conceal an infringement of any right covered by this Treaty or the Berne Convention:
  - (i) to remove or alter any electronic rights management information without authority;
  - (ii) to distribute, import for distribution, broadcast or communicate to the public, without authority, works or copies of works knowing that electronic rights management information has been removed or altered without authority.
- (2) As used in this Article, 'rights management information' means information which identifies the work, the author of the work, the owner of any right in the work, or information about the terms and conditions of use of the work, and any numbers or codes that represent such information, when any of these items of information is attached to a copy of a work or appears in connection with the communication of a work to the public.

#### **Essential reading**

WIPO, *About IP*. Chapter 5: International Treaties and Conventions on Intellectual Property, pp.270–277 – Substantive Provisions of the WCT. Available at: http://www.wipo.int/about-ip/en/iprm/pdf/ch5.pdf#wct

The WIPO Copyright Treaty (including Agreed Statements). Statute book, pp.304–308.

Ginsburg, J.C. 'The New (?) Right of Making Available to the Public', Columbia Law School, Paper No. 0478, *Columbia Public Law and Legal Theory Working Papers* (New York: Columbia Law School, 2004). Available at: http://lsr.nellco.org/columbia/pllt/papers/0478/

This paper analyses whether WIPO solved the problem it sought to address and how different WIPO is from Berne in its interpretation.

#### **Activity 5.1**

Go back to your chart and add sections for Berne, TRIPS and the WCT. Now fill in the chart with the basics of the provisions of these treaties. This will be a very helpful revision tool.

#### 5.3 Related rights

Copyrights are the legal rights given to authors for the protection and use of their literary and artistic works. With the emergence of cinema, sound recording and radio and television broadcast technologies, the producers and broadcasting organisations felt that they needed international protection from unauthorised copying, similar to that provided to authors. The traditional view of authors as the embodiment of entitlement to protection arising from the

#### **Producers of sound recordings**

Rome provides that producers of sound recordings have:

the right to authorise or prohibit the direct or indirect reproduction of their phonograms (Art. 10)

where states elect, a right of equitable remuneration for the use in broadcast or any communication to the public of sound recordings published for commercial purposes. This is to be paid by the user to the performers or to the producers of the recording, or to both.

The Convention does not grant the right either to authorise or prohibit this secondary use of the recording. It further says only that at least one of the interested parties should be paid for the use. That anyone would volunteer to pay twice is unlikely.

#### **Broadcasting organisations**

Broadcasting organisations have the exclusive right to authorise the:

simultaneous rebroadcast of their broadcasts

fixation of their broadcasts

reproduction of unauthorised fixations of their broadcasts or reproduction of lawful fixations for illicit purposes

communication to the public of their television broadcasts by means of receivers in places accessible to the public against payment.

Rome does not protect against distribution by cable of broadcasts (usually indicated as 'transmission').

#### What limitations/exceptions to these rights exist?

Exceptions include:

the use of short excerpts in connection with reporting current events

ephemeral fixation by a broadcasting organisation by means of its own facilities and for its own broadcasts

various uses solely for the purpose of teaching or scientific research.

Rome's mere 'possibility' of granting performers rights may make the entire right a limitation, however.

#### What is the minimum term of protection?

Rome accords a minimum term of 20 years from:

performance

fixation for sound recordings and inclusion of a performance in a sound recording

broadcast.

#### How do the rights arise?

The rights can arise without formalities. However, if country requires formalities these are considered as met by including on all copies a notice with the symbol 'P' and the year of first publication. The notice should also contain the name of the owner of the rights (producer) and performer or name of person who owns the performer's rights.

#### 5.3.3 Related rights since Rome

Even if it seems fairly 'flexible' in its wording, Rome defined standards for protecting of related rights when very few countries had any rules protecting performing artists, producers of phonograms and broadcasting organisations. Since Rome, numerous countries have enacted protections of related rights. Two major multilateral conventions are based on 'Rome' in a sense. These are the TRIPS Agreement and the WIPO Performances and Phonograms Treaty.

#### **TRIPS**

The TRIPS Agreement does not take Rome as its mandatory base and then layer over it, as it did with Berne. Rather, it incorporates a number of provisions of the Rome Convention. We will not further

#### **Essential reading**

WIPO, *About IP*. Chapter 5: International Treaties and Conventions on Intellectual Property, pp.314–320 – Special Conventions in the Field of Related Rights: The International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations ('the Rome Convention'). Available at:

http://www.wipo.int/about-ip/en/iprm/pdf/ch5.pdf#wct

The WIPO Performances and Phonograms Treaty. Statute book, pp.308–314.

#### Conclusion

Considerable efforts have been made on an international, multilateral basis to address the issues posited by digital works and networks, which were considered not adequately addressed by earlier international conventions agreed in a time before the Internet. The two most significant digital works treaties are the WCT and the WPPT, adopted in 1996. These include, *inter alia*, a new right of communication to the public by making works available by wire or wireless means at a place or time of their choosing, intended to address the way the Internet works. Other rights address the protection of digital works with effective technological protection measures and digital rights management information – also considered necessary in the Internet era. We will consider the issue of digital rights management further in the next chapter before we explore the specific implementation of these treaties by the US and the EU.

#### Reminder of learning outcomes

By this stage you should be able to:

identify the key international copyright instruments that address the protection of Internet works and digital rights management devices

explain how they operate with regard to the Berne Convention

explain why the WIPO Internet treaties were considered necessary

explain the provisions in the WIPO treaties that provide new copyright and related rights protection to digitised works online

explain what a digital rights management device is

identify some of the current digital rights management technologies and explain how they work

explain the WIPO treaty provisions regarding the enforcement of digital protection measures

analyse why the digital rights management protection provisions cause concerns with respect to user's rights under copyright

identify the legal instruments that implement the WIPO treaties in the US, EU and UK.

outline the provisions of the Digital Millennium Copyright Act outline the provisions of the Information Society Directive.