



Cambridge
Conference

www.cambridgeconference2003.com

Ordnance Survey
Romsey Road
SOUTHAMPTON
SO16 4GU
United Kingdom

Death of Copyright – Long Live Patents and Database Rights

N Rose
Partner
Field Fisher Waterhouse
United Kingdom

J Radcliffe
Partner
Field Fisher Waterhouse
United Kingdom

Paper 4D.2A

Death of Copyright – Long Live Patents and Database Rights

N Rose
Partner
Field Fisher Waterhouse
United Kingdom

J Radcliffe
Partner
Field Fisher Waterhouse
United Kingdom

Introduction

This paper will consider whether copyright as a form of protection for intellectual property within the context of the geographic information sector is now facing extinction.

Will the steady rise of patents being filed in Europe and in the United States combined with the new rights granted under the new European Directive on database rights continue to erode the status of copyright?

Intellectual Property within the Geographic Information Sector (the “GIS”)

There are a multitude of ways that geographic information can be represented. Intellectual Property (“IP”) is created in mapping databases and products, digital mapping products, mapping and topographic information, software, and technical know-how.

The protection of IP is important to organisations and individuals from the private, public, academic and voluntary sector involved in the supply and use of geographic information. The cost of acquiring, maintaining and distributing geographic data is high, and the protection and exploitation of intellectual property is a means to recoup some of these costs. It also encourages confidence in the quality of the information produced.

There are three significant forms of IP created in this sector which require protection and are discussed in this paper.

- Copyright
- Database Right
- Patents

It will be argued that copyright protection remains a vital source of IP protection in the GIS. The many ways that geographic information is represented requires diverse methods of protection. The ‘new’ Database Rights introduced into UK law provide only one of these methods of protection for specific types of databases produced by the GIS. Other forms of geographic information will remain heavily reliant on copyright protection. Similarly, the rise in patent use as protection for specific forms of geographic information provides a complimentary source of IP protection not an alternative to copyright protection.

Overview of Copyright Law

Copyright may exist in boundary maps, data bases, digital mapping products and other products generated within this sector which can be protected directly under UK copyright law.

It may exist in individual pieces of data (“individual data elements”) or in collections or compilations of such data. We will see that collections of data may acquire more than one form of copyright protection.

The most direct source of protection for copyright works produced by the GIS is UK law and European law.

Copyright protection is also provided by various multilateral agreements. One of the more recent agreements, which has changed the scope of rights granted to copyright owners, is the WIPO Copyright Treaty. The purpose of this agreement is to update the major existing treaties in order to provide for changes in technology, new markets, and new methods of use and dissemination of copyright works, for instance over digital networks and the Internet.

It will be argued that changes in technology and the methods used to produce, transmit or infringe copyright works have caused copyright protection to become even more vital to the GIS. In turn, UK copyright law and international treaties have responded by widening the scope of copyright protection, and strengthening the status of copyright overall.

Rights granted under UK law

Copyright law in the UK is governed primarily by the Copyright Designs and Patents Act 1988 (“the Act”).

Works capable of protection

Copyright will only attach to ideas expressed in a fixed form, when a “work” is produced. Section 1(1) of the Act specifies three broad categories of works which qualify for protection as follows:

- Original literary, dramatic, musical and artistic works
- Sound recordings, films, broadcasts and cable programmes
- Typographical arrangements of published editions

Works relevant to the GIS are likely to fall under the first category, specifically, copyright as a literary or artistic work.

Copyright in a literary work

A literary work is “any work, other than a dramatic or musical work, which is written, spoken or sung”. Such works include a table or compilation, a computer program, and separately, a database.¹

¹ Section 3(1) Copyright Designs and Patents Act 1988 (“CDPA 1988”)

In order to qualify for copyright protection as a literary work there is a two part test:

- (a) the work must be **original** in the sense that the author has spent a significant (that is not trivial) amount of effort, skill, and/or judgement in its creation; and
- (b) the work must be intended to provide **information, instruction or pleasure**².

A 'literary work' is a broad category and can encompass either individual pieces of data ("Individual Data Elements") or collections of such data elements. Both types of works may be produced by the GIS.

Protection for Individual Data Elements

To gain copyright protection, data must qualify as an original literary work.

There is no English legal case on whether a number, on its own with no other information, is capable of being a copyright work in this way. Such data as street names and postcodes may qualify as literary works. Under UK law, headlines in newspapers and object code (which is incomprehensible) have been considered to be literary works. A key factor in deciding whether such data does constitute a literary work will be the length of the data element. For example a Unique Street Reference Number (USRN), which is a twelve-digit number, allocated by local authorities to each individual street by street name and location may be a literary copyright work.

However, it is unlikely that copyright will exist in a single street name, a postcode, house number or single co-ordinates because of the two part test outlined above. Even if the data element is sufficiently long to constitute a literary work, for example a full postal address, it must also satisfy the originality requirement. If the data is derived from a wider copyright work it is unlikely to be original. Similarly, long digits on their own may not afford any instruction or information.

It is more likely that a street name or postcode or any individual piece of data may constitute a substantial part of another copyright work such that if the street name were copied, copyright in that wider work might be infringed.

Protection for Collections of Data Elements

A collection of data elements, for example a collection of postcodes, may be protected by literary copyright (as a table/compilation) or if it is a database, by copyright in a database or separate Database Right. The latter two forms of protection are dealt with in section 2.3 and section 7 of this paper.

In order to be protected as copyright in a table/compilation, the work must constitute a 'collection'. This could be for example the data in a printed map or collection of printed maps. The minimum requirement for a collection is probably one map.

The collection must also be original *and* intended to afford instruction, information, or pleasure. This means that the author must have spent sufficient (not trivial) amount of effort, skill and/or judgement in its creation. As a guide to this requirement, copyright has been found to subsist in a price list, chronological fixture lists of football clubs and an alphabetical list of railway stations contained in a railway guide.

² Exxon Corp v Exxon Insurance Consultants International Limited [1982] R.P.C.69

Literary Copyright – Protection

The Act specifies that the copyright owner (this is usually the creator of the work) has the exclusive right to do the following things in relation to his work: copy the work, issue copies of the work to the public, perform, show or play the work in public, broadcast the work or include it in a cable programme service, make an adaptation of the work or do any of the acts in (a) – (d) in relation to an adaptation of the work. Subject to certain statutory exceptions, it is an infringement of copyright to do any of these acts without the owners consent.

Copyright lasts for the life of the author plus 70 years in the majority of cases.

Copyright in a Database

If the collection of data elements such as a table or subsets of information can be defined as a database, it can attract separate copyright protection under the Act. Such a collection must fulfil the definition of a database in the Act, *and* be ‘original’, *and* be intended to afford instruction, information or pleasure. If it does not fulfil the latter two requirements but is nevertheless a database, it may gain protection from the *sui generis* Database Right which will be examined at section 6 of this paper.

Database Definition requirement

A database is defined under the Act³ as

“...a collection of independent works, data or other materials which [criteria 1] (our italics)

- (a) are arranged in a systematic or methodical way, and [criteria 2]
- (b) are individually accessible by electronic or other means” [criteria 3]

This is a broad definition and it is not difficult to fulfil. Criteria 1 requires that the data must be capable of being appreciated or useful in isolation in order to be ‘independent’. To fulfil criteria 2, at the minimum, only some form of arrangement to allow the individual independent parts to be located without searching the entire contents is required. Similarly with criteria 3, an individual part must be able to be located without searching through all of the contents, which is easily fulfilled in the case of electronic databases.

A database could be for example an entire database made up of maps, subsets of the database, and each set of digital information taken from each existing map.

Originality requirement – the Intellectual Creation Test

The test of originality⁴ is that the database must by reason of the selection or arrangement of its contents constitute the author’s own intellectual creation. This aspect could be potentially very difficult to fulfil. Clearly, an arrangement of data that involves a simple list or an arrangement alphabetically, even if it fulfils the definition of a database, could not be said to involve an ‘intellectual creation’. This makes the requirement for database copyright more stringent than that of literary copyright.

³ Section 3 CDPA 1988

⁴ Section 3A(2) CDPA 1988

It will have to be considered whether the arrangement or selection of individual data elements has necessitated intellectual input. For example, a collection of street names may constitute a database under the Acts definition. However, if the contents of the database is simply the arrangement of street names in alphabetical order, then this may not be sufficient to constitute the author's own intellectual creation. Another possibility is that the database is fully comprehensive (such as a list of all the street names in a particular county) in which case there has been no "selection" on the author's part.

Intended to afford instruction, information or pleasure

This requires that the author has spent sufficient (not trivial) amount of effort, skill and/or judgement in its creation.

Copyright in a database – Protection

The owner (the creator) of copyright in a database has the right to prevent anyone from doing any of the following activities in relation to the copyright work: copy, issue copies to the public, perform in public, broadcast or adapt (or a substantial part of it) without the owners consent.

An adaptation of a database means an arrangement or altered version of the database or any translation of it.

Copyright in an artistic work

An artistic work is described by the Act as 'a graphic work, a photograph, sculpture or collage irrespective of artistic quality, a work of architecture being a building or a model for a building or a work of artistic craftsmanship'. A graphic work includes drawings, diagrams, maps, charts or plans.

An electronic database could attract protection as an artistic work. For example a screenshot, the precise layout and configuration of the presentation of the information retrieved by the database on the user's screen.

Any artistic work created must be 'original' in the same way as a literary work in order to be a copyright work.

Rights granted under International Treaties

Copyright owners in the UK also benefit from rights granted under a number of international treaties. Part of the impetus behind these Treaties was to harmonise the copyright laws of member states and provide copyright protection for works outside the country where they were created.

The rights conferred by the most important treaties are outlined below. The first two treaties could be described as the 'old' treaties. These confer basic copyright protection that is reflected in the copyright law of many member states.

However, the pressure of technological and commercial developments and practices in the latter quarter of the twentieth century has necessitated further international agreements aim to provide up to date rights and protection. Such developments include video technology, satellite broadcasting, computer generated works and databases, and digital transmissions systems such as the Internet. The latter two Treaties below have tried to provide up to date copyright protection in this new digital environment. They have been referred to as the 'Internet Treaties'⁵.

Berne Convention for the Protection of Literary and Artistic Works (the "Convention")

The Berne Convention is administered by the World Intellectual Property Organization (WIPO). The Convention was adopted in 1886 but has been revised many times, the latest revision of the Convention was in 1971. Membership is open to any country but only if the minimum level of protection as set out in the Convention are provided for within the member states national copyright law.

The current edition of the Convention confers the following rights through four main categories of rights:

- *National Treatment*: copyright works created in one member state will be protected in each of the other member states in the same way that such state protects the copyright works of its own nationals.
- *Minimum term*: the copyright laws of every member state must provide the minimum level of protection as specified by the Berne Convention. Under the Convention, the minimum duration for copyright protection is the life of the author plus 50 years. Member states can choose longer periods.
- *No formalities*: Copyright protection cannot be dependent on formalities such as registration.
- *Obligatory Exclusive rights*: The exclusive rights granted to the copyright owners are the rights of: translation, reproduction "in any manner or form", public performance of dramatic, dramatico-musical and musical works, broadcasting and communication to the public by wire, re-broadcasting or loudspeaker or any other analogous instrument of the broadcast of the work, public recitation, adaptation, making cinematic adaptation and reproduction of works, and distribution of the works thus adapted and reproduced

Trade-Related Aspects of Intellectual Property Rights (the "TRIPS Agreement")

The TRIPS Agreement was concluded in 1994 and is administered by the World Trade Organisation. Like the Berne Convention, it obliges every member country (including the UK) to comply with the main provisions of the Berne Convention and further rights written into the TRIPS Agreement. In this way, it was hoped that the TRIPS Agreement would harmonise all the various national laws of member states.

⁵ The advantages of adherence to the WIPO Copyright Treaty and the WIPO performances and phonograms treaty – Document prepared by the International Bureau of WIPO. Page 2.

Some of the additional rights conferred by it on copyright authors in the member states include:

- Computer programmes whether in source or object code must be protected as literary works under the Berne Convention. This must be reflected in the copyright law of every member state.
- Compilations of Data are protected as original creations if they meet the criteria of originality by the selection or arrangement of their contents. The protection exists if the compilation exists in machine readable or other form. Importantly, this copyright will arise even if the contents of the compilation are already protected under copyright or another form of intellectual property.

WIPO Copyright Treaty (the “WCT”)

The WCT guarantees in its opening provisions that the Berne Convention ‘minimum’ level of copyright protection must continue to be upheld. It includes by reference all substantive provisions of the Berne Convention. It came into force in 2002.

However, the WCT has gone further than earlier treaties to specifically address the issues raised by the massive growth of the use of digital technology, especially through the Internet. The issues that were sought to be addressed were referred to as the “digital agenda”⁶.

The WCT clarifies importantly, that existing rights for copyright authors will continue to apply in the digital environment. However, the substantive provisions of the WCT also confer new rights in addition to those conferred by the three treaties above. The main provisions of the WCT are outlined below:

- Right of reproduction: Although not stated in the treaty itself, the Agreed Statements adopted by the Diplomatic Conferences state that the reproduction right is fully applicable to the digital environment. Also, the storage of work in an *electronic medium* constitutes a reproduction.
- Authors of literary and artistic works are granted the exclusive right of authorizing any ‘communication to the public’ of their works, by wireless or other 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 time individually chose by them. In other words, authors have the right to authorize the on-line transmission of their works⁷.
- Article 12(1) obliges member states to provide adequate and effective legal remedies against any person who (i) removes or alters any electronic rights management information without authority or (ii) distributes, imports for distribution, broadcasts or communicates to the public without authority, works or copies of works knowing that electronic rights management information has been removed or altered without authority.
- ‘Rights management information’ is described as information that identifies the work, or 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 codes that represent such information when any of these items of information it attached to a copy of the work or appears in connection with the communication of a work to the public.

⁶ The WIPO Copyright Treaty and The Performances and Phonograms Treaty – Document prepared by the International Bureau of WIPO page 4, Para 18.

⁷ WCT Article 8

Recent Changes to UK Copyright Law

Copyright Law in the UK although based on the 1988 Act is constantly being updated by European law. Some important changes are outlined below.

EU Directive on Copyright

The most recent changes will result from the implementation into UK law of the EU Directive on Copyright and related rights in the information society 2001/29/EU (“the Copyright Directive”). This came into force on 22 June 2002 and was scheduled to be implemented in the UK in March 2003.

In general, the Directive offers *greater copyright protection* for music, film and software companies, and also extends copyright protection to the Internet and other digital media.

One of the reasons for the delayed implementation of the Directive is that these changes have attracted opposition from various parties. The most significant changes to copyright law and those that may affect the geographic information sector are outlined below:

- (a) The most controversial change wrought by the Directive may be caused by the provisions designed to prevent ‘digital piracy’⁸. The Directive requires that Member States provide legal protection against *circumvention of copy protection*. The USA already has legislation which required this in the form of the Digital Millennium Copyright Act.

The result of these provisions is that the copyright owner is granted the same rights against someone who ‘de-scrambles’ a copy-protected work as is available against someone who has infringed the copyright in the work. The *mechanism* used to protect the work from copying will itself be protected to the same extent as the copyright work itself. In addition, anyone who intentionally sells, advertises, imports or distributes a device or product designed to de-scramble will be criminally liable.

- (b) The Directive contains similar provisions in relation to rights-management information. These are codes which identify the work, author and terms of conditions of use. Member states must protect copyright owners against the removal or alteration of this information.
- (c) The Directive grants the copyright owner the exclusive right to communicate his work to the public. This right is already granted under the WCT. Putting copyright works for example onto the Internet will be the exclusive right of the copyright owner.

Copyright protection: USA and India

Both the USA and India are members of the various treaties outlined above although India is not yet a member WIPO Copyright Treaty. Therefore, the protection offered by these international treaties is offered to owners of copyright works in these two countries, as it is to UK nationals.

⁸ www.news.bbc.co.uk/1/hi/technology. Article by Bill Thompson.

However, there are some key differences between the protections offered by the two countries national copyright laws. The most relevant differences are outlined below.

Copyright Law in the USA

The rights granted to copyright owners in the USA are derived from the United States Code, Title 17 – Copyright, Public Law No. 94-553, 1976 (“17 U.S.C”).

The provisions as to ownership and duration of copyright are similar to those in UK law. US law has now extended protection from life of the author plus fifty years to life of the author plus seventy years.

Copyright protection for Geographic Information

The ‘works of authorship’ that can obtain protection are largely the same as in UK law. These include literary works, whilst Maps and charts are specifically included under “pictorial, graphic and sculptural work”⁹. The other requirements of copyright, originality and fixed form must be satisfied for copyright to attach.

A compilation (a literary work) is defined under 17 US Code 101 as a collection and assembling of pre-existing materials or of data that are selected in such a way that the resulting work as a whole constitutes an original work.

Databases under USA law can only be protected by copyright as compilations. There is no separate database copyright protection.

Before the Feist decision, several US Courts had granted copyright protection for factual compilations (including databases) if the creator had expended the necessary amount of effort in the creation of the collection of facts or database. Thus, non-creative/original databases could achieve copyright protection. This is the same level of originality as is required under UK law in order for a literary work to gain copyright protection. This type of protection was wide in that the individual data within the database could also not be copied, as well as the database itself.

The Feist Decision

But a Supreme Court decision, Feist Publications¹⁰ removed this protection for unoriginal or uncreative databases and their content. It was held that if there was no original or creative selection involved with regard to facts or data, (in other words to qualify as a compilation) then the database would not be protected by copyright even if effort had gone into its creation. In this case, it was decided that a telephone directory was not protected by copyright. This would be the case for any collection of factual data, such as game scores or stock figures.

Thus under US law today, facts can never be original. The author of a compilation or database can only claim originality in the way that facts are presented. This originality must involve a level of creativity. This is a more stringent test than before, akin to the requirements of intellectual input under UK law for copyright in databases.

⁹ 17 U.S.C. sec 101

¹⁰ Feist Publications, Inc v Rural Telephone Service Co 499 U.S 340, 1991

Conclusion

The characteristic of geographic information in its many forms offers wide scope for creativity which is required under US copyright law. Such representation involves artistic expression on computer screens and in printouts, data models, and the integration of information, analysis of data, and the use of textual and tabular data.

If the minimal level of creativity which is required is taken into account, certainly some databases and compilations may struggle to get copyright protection but the majority will still rely upon it.

In a fairly recent case¹¹ a US court supported copyright protection for maps post – Feist. The Court held that there was creativity in the selection and arrangement of information, including reconciliation of conflicting information, by the claimant who conducted legal and survey research to draw parcel maps on US Geological Survey maps.

Nonetheless, valuable works which do not involve the necessary creativity required will face a gap in protection. For example, an electronic database may have no “arrangement” that will enable it to be original, so copyright will only subsist in the work if there is creative “selection” in the data stored. However, data may be collected according to a standard scheme or it may be complete, thus no selection is possible. Protection for such databases has been provided under UK law by the Database Right.

For this reason, it has been acknowledged by American commentators that a “new approach is necessary for the protection of maps, especially digitized geographic information systems...”¹². It has been suggested that amendment is required to the statutory definition of compilation to allow for non creative works, or the adoption of a *sui generis* statute as is provided in the UK by Database Rights¹³.

Alternative methods of protection for uncreative databases that do not qualify for copyright protection have been raised as discussed at section 8.

Digital Millennium Copyright Act

One of the significant new pieces of legislation to come out of the US has already been mentioned: the Digital Millennium Copyright Act 1998.

One of its provisions makes it a criminal offence to break or de-scramble the encryption used to prevent someone getting access to electronic content of a work. The reason for a person wanting access to such a work is immaterial. For instance, it might be to undertake non-commercial research, an exception to copyright allowed under US and UK law. This provision has now been to some extent replicated in European Law as was discussed above.

It would appear from the provisions in US and European/UK law that the rights granted to copyright owners are *increasing* rather than being eroded. Countries appear to be responding to the ‘digital age’ by reacting strongly against ‘hackers’ and the free distribution of copyright works without the owners consent.

¹¹ Mason v Montgomery Data Inc, 967 F 2d 135 (5th Cir 1992)

¹² Copyright in Electronic Maps, Dennis S. Karjala, 35 Jurimetrics J. 395 – 415 (1995)

¹³ Copyright in Electronic Maps, Dennis S. Karjala, 35 Jurimetrics J. 395 – 415 (1995)

Indian Copyright Law

The rights granted to Indian nationals are derived from the Indian Copyright Act 1957 (“ICA”), as amended by various Amendment Acts, and the Copyright Rules 1958.

Provisions on ownership, licences and assignment are similar to those provided by UK law. However, the duration of copyright is slightly different. The duration in unpublished works is perpetual, whilst for published works it is for the life of the author plus 60 years.

Copyright Protection for Geographic Information

The rights granted to copyright owners in respect of literary works are similar to those granted under UK law. Literary works include computer programmes, tables and compilations including computer databases.¹⁴

The requirement of originality is similar to that required under UK law. Originality requires the expenditure of skill, labour and judgement but not creativity. The Indian courts have protected compilations involving little originality, for example a compilation of addresses created using time, money, labour and skill amounted to a literary work, even though the source of data was commonplace¹⁵.

However, the position is changing, particularly with regard to the protection of databases.

Protection for Databases

There is no separate Database Right under Indian law. Databases are protected as literary copyright works. It could be inferred from the requirement for literary copyright above that as databases (a literary work) do not require creativity in order to be protected as literary copyright works, that copyright protection would be afforded for a wide range of databases.

However, the Delhi High Court has preferred to follow the theme of the USA Feist decision more recently with regard to copyright in literary works (which may include a database). In a case involving law reports¹⁶, the claimant was a publisher of a well-known journal known as Supreme Court Cases. The second claimant had introduced a data based package on CD-ROMs for finding out the Supreme Court ruling known as SCC-Online Case Finder. The defendants were accused of infringement of the copy-edited judgements contained in the SCC CD-ROM.

The court denied protection to these copy-edited judgements on the basis that ‘..... the protection of copyright must inhere in a creatively original selection of facts and not in the creative means used to discover the facts’.

¹⁴ Section 2 Copyright Act 1957.

¹⁵ Burlington Home Shopping Pvt. Limited v Rajnish Chibber & Anr. 1995 PTC (15) 278

¹⁶ Eastern Book Company & Ors. V Navin J Desai & Anr NLS 2002 CR/Del

It was decided that changes to the original judgments involving spelling, addition of quotations and corrections of typographical errors which went into the creation of the journal was not creative enough to qualify as a copyright work. Importantly, it was also suggested from the courts refusal to grant an injunction against the defendants, that the entire law report was not considered to even be a compilation or database capable of copyright protection. The claimants had contended that they were entitled to copyright protection on the basis that it involved selection, collation, arrangement and coordination of various judgements requiring the input of skill, labour and expenditure.

It appears now that databases will require a minimum level of creativity, which many databases may not be able to fulfil. Thus there is a gap in protection for non creative databases under both Indian and US law.

Database Rights – alternative protection?

Databases in various forms are common products of the GIS. As we have seen, they attract copyright protection as a database under the Copyright Designs and Patents Act 1988. However, in order to attract this protection they must pass the 'intellectual creation' test and fulfil the definition of a database under the Act. This is by no means an easy requirement.

There is now another form of protection available under UK law since the implementation of the European Database Directive¹⁷. Databases can now be protected by a new "sui generis" database right independently of copyright protection.

Database Rights granted under UK Law

The alternative form of protection for databases is granted under UK law under the Copyright and Rights Databases Regulations 1997 (the "Regulations"). This right comes into being automatically once a database fulfilling all of the criteria has been created.

Criteria

There are 2 criteria for determining whether a particular database will qualify for protection under this right.

- (a) Does it fulfil the definition of a database

A database is a (i) collection of independent works, data or other materials which (a) are arranged in a systematic or methodical way and (b) are individually accessible by electronic or other means¹⁸.

¹⁷ Directive 96/9/EC of the European Parliament and of the Council of 11 March on the legal protection of databases.

¹⁸ Regulation 6

(b) Substantial Investment

The database right will only subsist in the particular database if there has been “substantial investment in obtaining, verifying or presenting the contents of the database”¹⁹. The database does not have to be a copyright work nor does the contents of the database. There is no requirement of originality or intellectual input by the author as is required under copyright. This means that a far wider number of databases can now be protected, specifically non-creative/original databases.

The ‘substantial investment’ has to be made in actually obtaining, verifying or presenting the contents of the database. In measuring what is ‘substantial’, both quantity and quality is important.

To decide if the requisite substantial investment has gone into the database it is necessary to look at how the database was created, and the degree of financial, human and technical resources expended in its creation.

For example, a database made up of postcodes is likely to qualify for database rights, as is a database made up of a set of network co-ordinates. However, this will always be a matter of fact and degree depending on how the database was set up, the level of financial and human resources that went into obtaining, verifying or presenting the database contents.

Database Right – Protection

The owner of the database right is the “maker” of the database²⁰, which is a different concept to the author or creator of it. The maker is the person who takes the initiative in obtaining, verifying or presenting the contents of the database and takes the risk involved in investing in that activity.

Unlike the protection afforded by copyright, the database right lasts for only 15 years from its creation. Every time a substantial change is made to the contents of the database such that it is considered to amount to a new investment, the period of protection will start again. Similarly, if it is made publicly available in this time, the right expires 15 years from the end of the calendar year in which the database was first so made available.

The exclusive rights granted to the database owner are to prevent others from extracting or re-utilising all or a substantial part of the contents of a database²¹.

‘Extraction’ is the permanent or temporary transfer of the contents of a database to another medium by any means or in any form. This is actually a wider concept than it first appears. It can include copying, printing, downloading the database, whether electronically or not, and whether temporarily or not.

‘Reutilisation’ involves making the contents of the database available to the public by any means. This is also a wide concept which will cover on – selling or renting the database in paper form, online transmission, even providing a search and retrieval link from a web site to that database to enable others to extract information from it.

¹⁹ Regulation 13

²⁰ Regulation 15

²¹ Regulation 16

Recent Developments under UK law

There has not been uniformity across EU Member states as to the interpretation of the database right. The UK has so far in its case law endorsed a generous reading of the provisions relating to Database right such that most websites would be considered to be protected by database rights.

The first High Court decision regarding database rights²² involved a claimant, who spent considerable sums maintaining a massive computerised database containing horseracing information.

They supplied Satellite Information Systems, with pre-race information under a licence. These were lucrative for the claimant. The defendant was also a licence holder which enabled them to extract information from the database in certain ways.

The defendant had begun using data from the claimant's database for its new Internet service without obtaining a new license. Importantly, although this information was publicly available through other mediums, it was held that the defendant's were nonetheless infringing the defendant's database rights by (a) taking information from the database and loading it onto its own computers for use on its web site. This amounted to extraction of a substantial part of the database and (b) retransmitting the data taken from the database on the Internet for access by the public amounted to re-utilisation.

Implications for the GIS

Recent developments in UK law appear to be advantageous for database owners, particularly businesses and organisations who gain licensing fees from allowing extraction of data from them. Such organisations within the GIS should be alert to the opportunities for licensing that arises from database rights.

In particular, they should be vigilant to unauthorised use, especially if the databases are online. When creating databases, organisations should keep a record of the work and money expended in the creation of it, and a record of the dates when the database was significantly updated should be noted to ensure continuous duration of the right. It is a good idea to label the database to show that it is protected by Database right.

Database Rights in other countries

Many countries such as the US, Kenya and India do not provide for independent protection of non-original databases outside of copyright protection. Their national laws only provide for the protection of original databases as literary works. However, alternative legal solutions have been explored to fill this gap.

²² The British Horseracing Board Limited and Others v William Hill Limited [2001] EWCA Civ 1268

Alternative protection under US law

The arrangement of factual data can involve time and effort, and often requires some form of protection, especially if it is time sensitive. This could be if the creator of the database has put effort into collecting the most up to date information in a certain field with the value of the material being measured by how up to date it is. Two methods of protecting such databases and information within them have been used more recently, which do not involve copyright protection:

Hot news doctrine

This doctrine had been formulated in a 1918 case²³ where it had been decided that a property right could exist in “hot news”. That is news that is valuable because the person who had gained the information has gained it before anyone else. For example, sports scores from live performances. However, certain criteria had to be fulfilled in order to gain this property right for instance, that the party generated or collected the information at some cost or expense or the information was very time sensitive. Also, if it was alleged that a party had breached this property right, the use of the information had to be free-riding on the other parties efforts and the use of the information must be in competition with the product or services offered by the original party.

In recent cases, parties have sought to rely on this protection with variable results.

Trespass

The law of trespass has been used to protect factual information. It was decided in eBay Inc²⁴, that the contents of the eBay website was private property and that anyone offering the auction information collected by eBay to others (in this case by means of its own website) was trespass to chattels. The basis of this was that eBay had made it clear on its website that access to it was subject to certain conditions. The site has a signal on it showing that access to index or crawl the site is prohibited. The defendant had ignored this. Thus, the protection offered here may well be dependant on the database or data having a warning already on it to users which specifies how the information may or may not be utilised.

Alternative protection under Indian law

Databases are primarily protected under Indian law as copyright works. There is no separate database right. However, there are other forms of protection for databases, particularly electronic databases, outlined below.

²³ International News Service v Associated Press 248, U.S.215 (1918)

²⁴ eBay Inc. vs Bidder's Edge Inc, 100 F. Supp. 2d 1058 (N.D. Cal. 2000)

Information Technology Act 2000

This Act provides protection for electronic databases. It is a penalty if a person, without the permission of the owner or person in charge of a computer or computer system/network, downloads, copies or extracts any data, computer database or information from such computer, or computer system/network including information or data held or stored in any removable storage medium²⁵.

This provision does not require that the database is original, which is required under Indian copyright law. There is also protection against the copying of individual pieces of data as well as the databases themselves, and even copying of insubstantial amounts of the data or database is protected by the Act.

Conclusion

Copyright remains a vital source of protection for geographic information.

Firstly, the broad spectrum of works produced by the GIS requires protection by a broad based copyright law, and we believe that this is provided under UK law today. Single pieces of data and collections of data are granted protection through literary or database copyright if they achieve the required level of originality.

However the 'new' Database Rights introduced into UK law provides another form of protection for specific types of unoriginal databases which rewards investment. This sui generis right is not offered in other countries. This form of protection is not an alternative to copyright. It protects only a specific type of database and has a shorter duration than copyright. The majority of organisations within the GIS will still rely heavily on copyright, even if this is complemented by database right protection.

Secondly, changes in technology and the methods used to transmit or infringe copyright works have led to the scope of copyright protection being widened, and the status of copyright being strengthened. As the methods available for representing geographical information electronically has diversified, so in turn have the ways in which works can be infringed. Consequentially, copyright as a form of intellectual property protection has become even more vital to those in the GIS as a means of preventing these new methods of infringement.

²⁵ Section 43 of the Information Technology Act 2000