ABSTRACT

Legislators for intellectual property rights have traditionally balanced protection with user access to the protected property. In particular, information has been treated as deserving of wider access by users. Departure from these norms erodes the very justification for intellectual property rights. However, the combined effects of the sui generis database right and that for technological protection measures for electronic works introduced by the Database and Information Society Directives led to fears of monopoly powers over raw data and information and erosion of the traditional balances. The implementation and application of these measures in the UK and elsewhere appeared to confirm these fears. Given the opportunity to reverse these effects, both the European Court of Justice and the European Commission have failed to redress the balance. Consequently, urgent attention should be paid to control over regulation of database licensing.

Keywords

Database, sui generis right, copyright, information, digital rights management, access.
INTRODUCTION

Databases are repositories of information, of data. When intellectual property rights are applied to databases, it is vital that the rights given extend only to the database and do not allow monopolisation of the information therein. This is because, without access to ideas, the seedbed for creation and innovation is lacking. Knowledge and information do not spring into being in a vacuum. Ideas generate further ideas. As ideas do not share the finite properties of other commodities, sharing ideas does not deplete their stock (though it may lower their market value\(^1\)). Furthermore, ideas, or information, can be seen as a significant public and strategic resource in the so-called “information age” or “information economy”. Yet digital storage and dissemination of information in the form of data renders information a commodity subject to exclusivity and ownership,\(^2\) taking on the finite character of other commodities, so that the “information commons”\(^3\) is endangered. Globalisation of publication and of intellectual property rights only serves to increase the dangers to free information flows.

The introduction of a \textit{sui generis} database property right in the European Union by the Database Directive,\(^4\) and subsequent court decisions caused concerns that the protection extended to a database’s contents and risked monopolising information. These fears were particularly acute in relation to sole-source databases.\(^5\) Further protection for databases resulted from the

---

2 Particularly exclusive privileges resulting from intellectual property rights.
3 The ‘commons’ may comprise either open access public domain information (where no private proprietary rights subsist or are not exercised), and common property information resources of collected material made publicly accessible but governed by the collecting group (such a Open Source Software or the Creative Commons). The ‘information commons’ movement is analysed in Kranich N, ‘The Information Commons – A Public Policy Report’: http://www.fepproject.org/policyreports/infocommons.contentsexsum.html (last visited January 16th 2007).
Information Society Directive.\(^6\) This introduced legal support for technological protection measures applied to copyright works and databases, creating a dual layer of protection for databases supplemented by contractual controls. With the European Commission’s preliminary Review of the Database Directive in late 2005, and the rulings of the European Court of Justice in four cases concerning databases in November 2004, it is thus needful to review commentary on the database right in the light of access to information. Such a review must take place within the historical and purposive context of intellectual property law and the balances that have been sought to be achieved between access and protection.

It can be argued that the database right has been demonstrated to have achieved very little in terms of economic benefits, despite the perceptions of database manufacturers. Yet the fears surrounding access to information have not been met either by the Commission or the European Court of Justice. Traditional balances between intellectual property protection and user access have been considerably eroded. While this might point to removal of the database right altogether, the fact that technological protection measures for electronic databases, as well as contractual controls also provide strong inhibitors to open access to information, a better approach is to move the debate from the best approach to protection to the optimum approach to access and to impose controls over database licensing.

**INTELLECTUAL PROPERTY’S AIMS**

Intellectual property rights [IPR] provide their owners with exclusive or monopolistic power over their intellectual property within certain legislative boundaries. Doing so has traditionally been justified both as providing recognition of creators’ natural rights in the application of their intellect, and as an economic instrument\(^7\) designed to stimulate innovation and its

---


\(^7\) The economic incentive argument is open to challenge. Drawing from the last 50 years of critique of natural monopoly theory (that informational asymmetry disturbs the regulatory process of natural monopolies, that alternative forms of competition can address this and include broader considerations in constructing the market, and that socio-political concerns require consideration of political and consumerist issues), Shubha Ghosh argues that similar criticisms can be made of the incentive justification for intellectual property rights, which is based on an assumption of high
dissemination. Where copyright has been applied to collations of information, the property right has been balanced with the social need for access. This is done by means of the right’s duration, the requirement for originality, the limited exclusive rights give, and an extensive set of exceptions allowing for specific uses. However, the increasingly “ephemeral” nature of technology, and the spread of IPR threaten to so depart from this approach as to diminish access to information at considerable social cost. Thinking of digital dissemination of information, Julie Cohen states:

The intellectual property regime that is emerging on the Internet will do three things: It will allow proprietary control over access to information. It will leverage that control to achieve an astonishingly broad range of restrictions on information use – not only by copyists and other free riders, but also by citizens, consumers, critics, and legitimate competitors. And, as a result it will reshape the ways in which online interaction is structured.

She goes on to state that important normative and policy questions arise relating to the value of information access and exchange, and that the questions should be addressed to IPR as a system.

Consequently, it is necessary to achieve two results – to generate information and construct its platforms requires investment, and IPR can protect against the market failure that imitation would otherwise cause. But fixed costs and low costs of copying which cannot always be justified. Nor do exclusive rights determine the rate required to achieve the desired incentive effect. Potential competition may cater for the risk of destructive competition, while the interests of use and distribution require consideration and limits on strong rights. He argues that the US approach to database protection is consistent with this criticism. ‘The Intellectual Property Incentive: Not So Natural as to Warrant Strong Exclusivity’, SCRIPT-ed, Vol 3, Issue 2, 2006. http://www.law.ed.ac.uk/ahrb/script-ed/vol3-2/ghosh.asp

---

9 For example, patenting increasingly extended to software implemented inventions, and even business methods, the new database right created by the European Database Directive. Cohen J summarises: ‘[t]raditional intellectual property rights, which were limited monopolies operating in distinct and different subject areas, have been retrofitted to become sophisticated, mutually reinforcing methods of controlling information use’: ‘Intellectual Property and the Information Economy’, in Cyber Policy and Economics in an Internet Age, (Boston MA, Kluwer, 2002).
11 And it has been argued that, lacking an economic incentive for the compilation of useful databases without a database right has limited the development of science and research by limiting the number of experiments conducted in a study and by contributing to a reluctance to share information: Hasan A ‘Sweating in Europe: The
there must also be access to the information IPR protects in order to continue the generation cycle. It has been noted, for example, that a high proportion of European databases relying on the *sui generis* database right have been sole source databases, \(^\text{12}\) rendering sufficient access to their contents a *necessity* for informational progress.

**Judicial Treatment of Facts**

When interpreting IPR, facts, or information, have been given special treatment by the courts for just these reasons. This has taken the form of (i) either refusing copyright protection at all, or (ii) of condoning particular uses or users of information by findings of non-infringement or, (iii) by preferring countervailing rights; perhaps precursors of three of the alternate ways in which both protection for the effort and expense of collation and sufficient access to the content of such compilation may be secured. Examples can be drawn from the United States, England and Germany.

In *Feist v Rural Telephone* (1991),\(^\text{13}\) the US Supreme Court held that the “white pages” of a telephone directory were not protected by copyright, and also cast doubt on the extent of protection for comprehensive unstructured databases. They rejected the concept of “the sweat of the brow” as constituting sufficient originality for protection of a copyright work. Canadian authority\(^\text{14}\) took the same approach to “yellow pages”, although UK and Australian\(^\text{15}\) authority has not followed suit for copyright compilations. It remains to be seen how long this stance can be maintained in the face of the civil standard of originality as the author’s own intellectual creation being applied in the Database Directive and CDPA 1988, s. 3A(2).\(^\text{16}\)

---


\(^{14}\) Tele-Direct Publications v American Business Information (1997) 76 CPR (3d) 296, FC Canada.


In *Ravenscroft v Herbert* (1980)\(^{17}\) taking historical fact from a non-fiction book of history was not found to infringe the book’s copyright. The court took the view that some types of work must expect more use before the point of taking a substantial part and infringing use is reached; and that historical fact was one such area.

In the German case of *Brandenbuch* (2001)\(^{18}\) the District Court held that the public interest in freely accessible information overrode any substantial investment in its collection. This was held in relation to a collation of information about people living on the Isle of Rügen taken from the publicly available yellow pages and trade register. Claims of unfair competition, breach of confidence and copyright all failed.

**Purposive Legislation**

Intellectual property legislation is grounded on a fundamental concept of a public domain. The common resource of ideas and information is limited by private property rights only to the extent deemed necessary in order to stimulate further production of ideas, inventions, works, and designs for the public’s benefit. And these rights fall into the public domain once the incentive for their creation has been realised, so that protection is limited in terms of its duration, as well as its scope. As a seedbed for development, factual information would seem to be a form of intellectual property least deserving of extensive protection. Certainly indefinite protection for information, as opposed to its arrangement, collection, or classification is, at the very least, potentially dangerous. To impose an unwarranted cost, let alone the need for repetition of work already done, is inefficient, or worse, in an age when research and development rests on a bedrock of information and knowledge.

The Statute of Anne, 1710,\(^ {19}\) the first statute relating to copyright, based copyright in the incentive to stimulate authors to create:

“…for the encouragement of learned men to compose and write useful books…”

---

\(^{17}\) [1980] RPC 193.


\(^{19}\) The Copyright Act, 1709, 8 Anne ch 19, came into force April 10th 1710. The Act replaced the monopoly granted by the Monarch to the Stationers Company. It vested the right in authors and not publishers, and limited the period of protection to a fixed term.
Similarly the US Constitution\textsuperscript{20} grounds intellectual property in its incentive effect:

“…To promote the Progress of Science and the useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries…”

The United Nations Declaration of Human Rights [UDHR]\textsuperscript{21} further emphasises the balancing act that intellectual property laws should provide:

(1) Everyone has the right freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits.

(2) Everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author.

\textit{The Directives’ Aims}

It would appear that these fundamental aims were not applied to the two Directives. In 1992, at the time that the Database Directive [DD] was adopted, estimates of the origins of global accessible online databases saw Europe having a quarter of the market, while the US share amounted to 56%. The perception thus was of a potential for considerable growth in the European market and the DD must be placed within this context. Indeed, in its 2005 report\textsuperscript{22} the Commission stated that the overall objectives of the DD were to (i) ensure an attractive environment for investment in databases, (ii) ensure that the European information markets could develop “properly”, and (iii) improve the global competitiveness of the European database industry. Thus the directive was drafted primarily as an economic instrument designed to boost Europe’s information trade and compete with that of the US. Its aims of harmonising legal protection for databases, safeguarding investment in database creation and ensuring legitimate access must be seen as serving that economic purpose. Yet, the directive itself is based on the illogical conclusion

\textsuperscript{20} The Constitution of the United States of America, Article 1, Clause 8. The Convention was adopted by a convention of States on September 17th 1787, and ratification was completed on June 21st 1788.

\textsuperscript{21} United Nations Declaration of Human Rights, Article 27.

that strong protection for original and factual databases was necessary to achieve this aim when the *Feist*\textsuperscript{23} decision made it clear that no equivalent protection for non-original databases existed in the US. Instead, the US industry was able to rely on a number of different models of protection, including shrink-wrap and click-wrap licences, technological protection, value-added services and frequent updating.\textsuperscript{24}

The Information Society Directive\textsuperscript{25} (ISD) enabled the EU and its Member States to ratify the two WIPO “Internet Treaties”,\textsuperscript{26} but can also be seen to be founded with an economic aim of allowing the EU to compete within the competitive, dynamic knowledge-based economy.\textsuperscript{27} Although the directive provided an extensive list of exceptions to copyright protection for digital works, only one was mandatory and Member States were able to choose which exceptions to adopt. Neither harmonisation of copyright law, nor a well founded balance between access and protection was achieved as a result. Moreover, the “grandfather clause”\textsuperscript{28} whereby Member States may retain existing national exceptions was restricted to analogue works.

**THE DATABASE RIGHT BEFORE 2005**

The statutory *sui generis* right, though framed in terms of unfair competition, had the potential to monopolise actual information, and not just


\textsuperscript{26} The World Copyright Treaty, 1996 and the World Phonograms and Performances Treaty, 1996. These WIPO treaties adapt protection for authors, performers and sound recording producers to the digital age and the perceived threats to their works rendered by electronic communications.

\textsuperscript{27} Recital 4 of the ISD states:

“A harmonised legal framework on copyright and related rights, through increased legal certainty and while providing for a high level of protection of intellectual property, will foster substantial investment in creativity and innovation, including network infrastructure, and lead in turn to growth and increased competitiveness of European industry, both in the area of content provision and information technology and more generally across a wide range of industrial and cultural sectors. This will safeguard employment and encourage new job creation.”

\textsuperscript{28} Information Society Directive, Article 4(3)(o).
its collated form.\textsuperscript{29} If information so protected could not be obtained elsewhere the result was to provide the database manufacturer with the only key to that information.

Yet Recital 40 indicated that it was investing financial resources and/or the spending of time, effort and energy that was protected. It was damage to this investment, and not merely parasitical competition, that was guarded against. For those needing access to information such a right should have promoted the creation of useful databases. The despotic tendencies of the right arose from the lack of exceptions, the fact that reuse of information extracted in another format was likely to infringe,\textsuperscript{30} and the right’s potentially eternal existence. Substantial changes resulting in a database being regarded as a substantial new investment qualified the renewed database for its own term of protection. This effectively allowed for eternal protection for so-called “dynamic” databases.

Just as copyright protection is confined to the expression of ideas, the Database Directive was apparently not intended to create any new rights in underlying data, nor to extend copyright protection to data, as stated in Recitals 45 and 46. It appeared that it was intended to preserve the traditional copyright balance of access and protection in regard to information. Only to have provided protection for investment in the collation of information should have allowed competitors to recreate that collation and alternative sources to be made available.\textsuperscript{31}

Lawful users might extract or re-utilise insubstantial parts of the contents for any purpose, subject to any copyright subsisting in the contents themselves.\textsuperscript{32} In 2005 the ECJ held that “substantial” in qualitative terms

\textsuperscript{29} Article 7 of the Database Directive provided that database makers might prevent extraction and/or re-utilisation of the whole or a substantial part of their databases, where it could be shown that, qualitatively and/or quantitatively, they had invested substantially in either obtaining, verifying or presenting the contents. It runs for fifteen years from 1 January of the year following the date of completion of making the database, or its first making public within the fifteen year period from that making.


\textsuperscript{31} As is illustrated by the result of the \textit{Feist} Case in the United States, where the Supreme Court rejected ‘sweat of the brow’ protection for data. Justice Sandra Day O’Connor stated “That there can be no valid copyright in facts is universally understood. The most fundamental axiom of copyright law is that “no author may copyright his ideas or the facts he narrates””. \textit{Feist Publications Inc v Rural Telephone Service} 499 US 340, 111 S Ct 1282, 113 L Ed 2d 358 (1991).

\textsuperscript{32} Before 2004 most uses of benefit to a user appeared to be regarded as substantial – so that Laddie J took into account William Hill’s interest in the information they
relates to the investment securing protection for a database, and not the value of the information itself. However, it remains the case that where there has been investment of the right sort, \(^{33}\) it is likely that what is valuable to the user was the result of substantial investment.

Lawful users were also given access to, and use of, information for specific purposes. However, these exceptions might not provide sufficient means of access to information. They relate only to “lawful users”, a phrase neither defined by the Directive, nor by the Copyright and Rights in Databases Regulations 1997. Chalton and Rees\(^ {34}\) pointed out that careful drafting of licences might restrict a user to limited parts of a database and for limited uses, thus constraining “lawful” use. The ECJ appears to support this conclusion in their *British Horseracing Board v William Hill* ruling:

“Of course, the maker of a database can reserve exclusive access to his database to himself or reserve access to specific people….It is legitimate for the maker to charge a fee for the reutilisation of the whole or part of his database which reflects, inter alia, the prospect of subsequent consultation and thus guarantees him a sufficient return on his investment.”\(^ {35}\)

There was no general right of private use for electronic databases, despite the fact that Recital 50 does not distinguish between electronic and non-electronic databases. Substantial parts might be extracted for teaching or scientific research, provided that this was non-commercial and the source indicated. Scientific research relates both to the natural and human sciences. Lawful users might not “perform acts which conflict with normal exploitation of the database or unreasonably prejudice the legitimate interests of the maker extracted when determining the issue of substantiality for infringement. So too did the District Court of The Hague in *NVM v De Telegraaf* [President District Court of The Hague, 12 September 2000, [2000] Mediaforum 395]. The Court added that even extraction by the defendant newspaper’s web-based search agent of small amounts of data from the plaintiffs’ real estate database would qualitatively constitute substantial extraction, since it might be of great value to the end user. The decision was overturned on appeal [Court of Appeal of The Hague, 21 December 2000, [2001] Mediaforum 87] but on a different point.

\(^{33}\) In the gathering of pre-existing information, and not its creation: *British Horseracing Board v William Hill Organisation* (2004).

\(^{34}\) Chalton S and Rees C, *Database Law* (Bristol, Jordans 1998).

\(^{35}\) Paras 55 and 57, *British Horseracing Board v William Hill Organisation* (2004). In para 58 the ECJ continue: ‘The consent of the maker of the database to consultation does not entail exhaustion of the *sui generis* right.’
of the database.” The Munich District Court held in August 2002 that the
database right applied to a collection of laws. Although laws and statutes were
exempt from copyright protection, the database right applied because the
exhaustive list of exemptions in Article 9 of the Directive did not allow such
an exclusion.

The consequence was that access to information held in databases,
particularly information whose sole source was the database, was confined to
those already licensed, possibly at a fee, and for a limited set of non-
commercial purposes. The exception for scientific research and education
was termed a “kind of fool’s gold”, which apparently disregarded the fact that
the equivalent in the Berne Convention applies to information already in the
public domain, allowing additionally for use of a particular expression of the
information, whereas the raw database material may not lie in the public
domain. Additionally, the exception only applies to extraction and not re-
utilisation.

The end result was apparently the strongest intellectual property
protection other than a patent; for subject-matter (information) that carries
none of the value-added originality nor novelty necessary for copyright or the
grant of a patent, even though there had been investment in its collation.
While a competitor might re-create the database - if the raw data was
available elsewhere - this would be economically inefficient. Additionally a
monopoly situation deters from the production of secondary products and
might encourage abuses of market power. Not only this, but the sui generis

---

36 As Chalton and Rees discussed, competing software manufacturers, and makers of
electronic systems in general, receive favourable treatment in relation to use of
another’s protected product. The Software Directive and the Design Right
(Semiconductor Topographies) Regulations 1989 allow for reproduction for the
purpose of analysing or evaluating the design or the embodied concepts, processes,
systems or techniques. This latitude has not been extended to databases, so that
commercial use is more limited than private and non-commercial use.

37 And the ‘most dangerous’ in Vaidhyanathan’s view: Copyrights and Copywrongs

Vanderbilt Law Review 50, Neeta Thakur argued that as a fair user can re-gather data
and re-compile a database without infringing or by seeking a licence fair competition
was not hindered. Because, she said, a non-proprietary database maker faces price
competition from efficient second-comers there was an incentive to licence at a
reasonable rate, and to price reasonably or face price competition from rivals with
access to data in the public domain. These competitive pressures should provoke
efficiency in data collection and prevent any monopolistic behaviour by database right
holders. The argument avoided, however, the potential reality that recreation would
be inefficient and uneconomic, thus conferring a de facto monopoly on database
makers, and the fact that much data is not in the public domain.
right actively created an incentive to keep data out of the public domain, as illustrated by Reichman and Samuelson,\textsuperscript{39} thus not only monopolizing the collection of information but its free flow thereafter. This Thakur acknowledged, proposing compulsory licences for sole-source data.\textsuperscript{40} However, examples of the potential power of this new right emerged in pre-
\textit{BHB v William Hill} European cases.\textsuperscript{41}

**Effects of the Database Directive**

The intention behind the \textit{sui generis} right was to avoid the US situation where, in the absence of IPR, only contract and confidence could be employed to protect investment and against market failure.\textsuperscript{42} This limits dissemination of information to those with a relationship to the maker. However, if the European right over-protects databases, a similar restriction on access is the result. Nor can comfort be taken in the directive’s effects being limited to Europe as the European Commission “aggressively” put the right forward as a model, incorporating it in association trade agreements. States adopting database legislation include most of Eastern Europe, the former Soviet Union and Mexico.\textsuperscript{43}

“Database” is widely defined in the directive, going beyond a mere collection of data.\textsuperscript{44} The Explanatory Memorandum describes database

---

\textsuperscript{40} Compulsory licence provisions were included in the draft Database Directive but dropped from the adopted version.
\textsuperscript{41} Institute for Information Law, The Database Right File, \url{http://www.ivir.nl/files/database/index.html} (last visited January 16th 2007).
\textsuperscript{42} It should not be thought that the \textit{Feist} case leaves US owned databases overly vulnerable. Relief from copying may lie in the ‘hot news’ misappropriation doctrine, contractual protection, trade secret protection, the law of trespass and technological protection measures. However, Hasan points out the limitations of each: Hasan A ‘Sweating in Europe: The European Database Directive,’ (2005) 9 Comp L Rev & Tech J 479.
\textsuperscript{44} Encyclopaedias and multimedia CDs may qualify. Hugenholtz points out that database contents do need to be works or data and may include images, sounds and other entities (such as biological specimens).
Before 2005, European case law granted the right to telephone directories, collections of legal materials, real estate information websites, listings guides, bibliographies, encyclopaedias, address lists, company registries, exhibition catalogues, tourism websites, collections of hyperlinks, hit parades, and more.

One of the main criticisms of the *sui generis* right was that it enabled publicly available information to be protected, as the UK decision in *BHB v William Hill* appeared to confirm. The scientific community argued that repeated and systematic uses of parts of databases was normal in scientific research and did not unreasonably prejudice the maker’s legitimate interests.

The lawful user exception was argued to be narrow and unclear in the *NautaDutilh* study which preceded the Commission’s report on the Database Directive. In particular, the study draws attention to the Royal Society’s strong criticisms of the Database Directive’s defence for the purposes for teaching or scientific research. They state that it is not mandatory for adoption by Member States, is confined to lawful users, does not extend to re-utilisation of data and the wording unclear, as is the restriction to non-commercial purposes, particularly as much research will have commercial applications and cannot be undertaken without such sources of funding. The UK research based industry estimated that the changed exception was likely to cost it £1m a year.

The study also states that the potentially eternal protection for a dynamic *sui generis* database was felt to be excessive and unclear. And it concluded that “most users feared that the Directive would hinder access to information”.

Looking at the database right from a competition point of view, Hugenholtz says:

---


47 ‘Lawful’ is taken to refer to contractually licensed use, and not use permitted by the law; although the exception’s purpose was to allow for ‘permitted uses’ outside contract such as fair dealing and private copying. This should be compared to Article 5 of the ISD, which provides, albeit optional, exceptions for Member States to the reproduction right without restriction to lawful – or licensed - users.

“The anti-competitive effect of the *sui generis* right is inversely proportional to the latitude left to potential competitors to “invent around” a protected database. Whenever the protected database is the sole source of certain information,…, protection by database right would amount to a full-fledged information monopoly preventing any uses in derivative markets.”

Further, the right has been used in actions against the activities of search engines, hindering the flow of information over the WWW.\textsuperscript{49} Electronic agents, often termed “bots”, “spiders” or “crawlers”, provide automatic browsing of the web as part of software designed to enable users find web pages relevant to search terms. These agents retrieve a document, and then successively all those documents linked within its hypertext structure. All the documents retrieved are then indexed in a database contained their web address [URL], and information from their text. Users making a search are then supplied with a link to the document. Consequently search engines, now that the web consists of at least 11.5 billion web pages,\textsuperscript{50} index several billion pages and store their text. Finally a search engine contains software to link a user’s search with relevant pages from their database. By uploading a site a web site owner may be taken to be implying consent to access by crawlers as well as other users, particularly where their metadata includes keywords and descriptions of their content. However, web page owners may use robot exclusion protocol (robot.txt files) or robot metatags to indicate what of their site may be searched and indexed. This is dependent on the crawlers being programmed to detect these messages, but may suffice to negate any implied licence. Online new providers and other web sites have taken exception to links to their content in several cases.\textsuperscript{51} It remains to be seen whether the ECJ’s interpretation of the Database Directive would alter these cases.

Interpretation

It soon became clear that the Database Directive did not provide clear guidance, and national courts reached differing conclusions in its interpretation. This was particularly so in relation to the meaning of “substantial investment”. Questions arose where the database activity was not the main business of an enterprise, so that while the “subsidiary” (or “spin-off”) activity of compiling a database of real estate property did amount to protectable investment in the Dutch case of *NMV v De Telegraaf* (2000), in another Dutch case it was held that newspaper headlines did not, comprising a mere “spin-off” from the prime activity of newspaper publishing (*Algemeen Dagblad a.o. v Eureka* (2000)). Another area of difference related to exploitation of online databases by search engines providing hypertext links, centring on the interpretation of “substantial part”. In the German case of *Paper Boy* (2003) hypertext linking to headings of press articles was held not to infringe the database owner’s right, while in other similar cases deep linking to articles has been held to infringe.

Technological Protection

Monopolisation of information is equally a hazard of copyright law adapted to the digital era. Protection has been extended to technological measures that can be used to protect digital copyright works either from access or copying as a result of implementation of the World Copyright Treaty.

---

52 German Federal Court of Justice, 18 July 2003.
54 And not only copyright, contract can be used to similarly restrict access to information so as to confine it to access only with payment: *Jurisline v Reed Elsevier*. For an account of this litigation see Halvorsen T ‘The Jurisline Litigation: Implications for Alternative Online Sources of Primary Legal Authority’: [http://www.lexnotes.com/industry/jurisline/JurisImp.htm](http://www.lexnotes.com/industry/jurisline/JurisImp.htm) (last visited January 16th 2007).
55 Article 11 states: “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 authorised by the authors concerned or permitted by law.”
The effect of this can be seen both in the implementation in the United States in the Digital Millennium Copyright Act [DMCA] 1998, and the potential consequences of the Information Society Directive in European Union Member States. Exclusivity based on technology has the potential to be unlimited in extent.\textsuperscript{56} Not only that, technological control over access and/or copying of digitised works is, at present, a blunt instrument.\textsuperscript{57} All use is blocked, as the controls have not been engineered to detect and limit only infringing uses of copyright. Should a legislature determine that some limitations over technological control are essential, it would require the provision of technology to circumvent the controls. However, experience already shows that any such circumvention technology would quickly spread and effectively enable all access, whether permitted or not,\textsuperscript{58} making it difficult to allow for permitted uses of information. This conundrum is well illustrated by both DMCA and the Information Society Directive.

Digital format poses considerable problems in relation to the traditional copyright balance. Legal protection given to technological digital rights management by Section 1201 Digital Millennium Copyright Act 1998\textsuperscript{59} in the United States and the Information Society Directive in the European Union has given rise to criticisms that the freedom of expression is jeopardised, as is the right of private copying. Information published in copy-protected form, without another source, is effectively monopolised. While, in the United States constitutional guarantees for freedom of expression may be invoked against this monopoly, the Information Society Directive merely places the onus to allow for private copying on Member States without any indication of how this may be done. Consequently, copyright’s idea/expression dichotomy may prove an ineffective “balancing aid” for databases.

\textsuperscript{58} Universal City Studios v Reimerdes, SDNY 00 Civ. 0277 (LAK), upheld by the United States Court of Appeals for the Second Circuit, November 2001. Appeal to the Supreme Court was dropped in July 2002.
The UK Copyright and Related Rights Regulations 2003

Technological protection measures [TPMs] applied to copyright works or unoriginal databases receive legal protection against circumvention. This protection does not extend to TPMs which control uses of a work outside the scope of copyright or database right. At least theoretically, therefore, if circumvention technology can be produced which only enables permitted uses of protected works or databases it would be legitimate to both use and deal with such devices or services.

Copyright owners, their exclusive licensees, as well as publishers (including electronic publishers) have the same rights as a copyright owner has against infringers against a person who circumvents effective TPMs applied to a work, knowing or having reasonable grounds to believe that he is pursuing that objective. They have the same rights against those who deal in circumvention devices and services. These provisions are expressly extended to the database right – CDPA 1988, s. 296ZA(6). It is also a criminal offence to deal in devices or services designed to circumvent effective TPMs.

Permitted Uses

If TPMs prevent permitted uses complaint may be made to the Secretary of State by a user or representative of a class of users. The Secretary of State has power to make such directions as are requisite or expedient to establish whether any voluntary measure or agreement exists, or in the absence of any voluntary provision to make the permitted use available. The recipient of any

---

61 TPMs are defined as ‘any technology, device or component which is designed, in the normal course of its operation, to protect a copyright work other than a computer program’: CDPA 1988, s 296ZF. They are effective where the copyright (or database right) owner controls use through an access control or protection process such as encryption, scrambling or other transformation of the work, or through a copy control mechanism which achieves its intended protection.
62 CDPA 1988, s 296ZF(3).
63 CDPA 1988, s 296ZA.
64 CDPA 1988, s 296ZD. This section is equally applied to unoriginal databases – CDPA 1988, s 296ZD(8).
65 CDPA 1988, s 296ZB. This section is not expressly applied to unoriginal databases.
66 Listed in CDPA 1988, Schedule 5A. These include Reg 20 and Schedule 1 of the Copyright and Rights in Databases Regulations 1997, SI 1997/3032.
such notice is under a statutory duty to comply. The Gowers Review of Intellectual Property noted that by the time of the Report in December 2006 no notice of complaint had been filed, and that both the Consumer Project on Technology and the RNIB had told the Parliamentary AIPG committee that the process is “slow and cumbersome”. Nor does this provision apply where copyright works or databases have been made available to the public on agreed contractual terms in such a way that members of the public may access them from a place and at a time individually chosen by them.

The effect is that information locked into copyright or unoriginal databases by TPMs may only be accessed at a price, or with considerable difficulty through a cumbersome administrative procedure. However, where licensing schemes exist, the Copyright Tribunal does have jurisdiction over schemes relating both to database copyright and the database right.

**Effects of Technological Protection**

That technological protection has led to restrictions over the use of information can be seen in evidence given by the Library Associations to the Library of Congress stating that journals from the American Chemical Society request that they be allowed to send cookies to users’ workstations to monitor use. A user refusing this invasion of privacy is denied access at her workstation even though her organisation has a subscription to the journal. Similarly, on 29th March 2002 The Times reported that Syngenta, a Swiss agrochemical company had declined to place the genetic code of rice, the world’s most important food crop, in the unrestricted public database Genbank; publishing it in the journal *Science* but maintaining the raw data in a private website to which they control access. Similar controversy surrounded the publication of the human genome by Celera in 2000. The British Library added its concerns in 2006, arguing that TPM may

---

67 CDPA 1988, s 296ZE(5).
68 Gowers Review of Intellectual Property, December 2006: [http://www.hm-treasury.gov.uk/independent_reviews/gowers_review_intellectual_property/goversreview_index.cfm](http://www.hm-treasury.gov.uk/independent_reviews/gowers_review_intellectual_property/goversreview_index.cfm) (last visited 16th January 2007).
69 CDPA 1988, s 296ZE(11).
70 CDPA 1988, s 296ZE(9).
71 Copyright and Rights in Databases Regulations 1997, Reg 24 and Schedule 2.
The database right may also be used to challenge Internet information location tools such as spiders and bots. Equally, hypertext linking to documents has been found to infringe the database right in circumstances such as the Danish Newsbooster case. Newsbooster provided an online news updating service, but were found to have infringed the newspaper’s database rights by providing deep links direct to articles in the online versions of the papers. Using “bots” to scour the papers’ web sites was held to infringe the Danish Copyright Act. The situation in Europe is not clear, however, with a number of differing interpretations of the Database Directive giving apparently inconsistent results. In the Dutch Kranten.com case, on its facts, deep linking to online newspaper articles by using their headlines was found not to infringe the database right. However, as the court pointed out in Kranten.com the use of spiders and other “bots” can be guarded against by the use of technology. Meanwhile, Newsbooster launched a peer-to-peer service in an attempt to evade the court’s ruling. In September 2006 a Belgian Court ordered Google News to remove headlines, excerpts of news stories, and small photographs from its news search service within 10 days, or to face fines of 1,000,000 euro per day.

77 PCM v Kranten.com, Case/Docket Number 138609/KG ZA 00-846, District Court of Rotterdam, 22 August 2000.
Effects of Contractual Protection

There are already many anecdotal pieces of evidence suggesting that the strength of contractual measures added to legal and technological protection give database owners unwarranted control. In Canada the company to whom the Canadian Hydrographic Service (who make the charts at tax-payers expense) assigned the copyright in marine charts in electronic form succeeded in a copyright action against other producers of the charts. The result was that boat owners using devices reliant on the infringing electronic charts would not be able to use up-to-date charts, the implications of which were perceived to be highly dangerous. This should be contrasted with the decision of the Supreme Court of Canada in Law Society of Upper Canada v CCH Canadian (2004).80 There, the court applied a wide interpretation of the fair dealing defence to an allegation of infringement by photocopying cases and articles. In particular, importantly, they advocated the exceptions to copyright being regarded as users “rights”.

An increasing number of works are, and will be, released only as CD-ROMs or online, and not in “traditional” format. Any use after paid for access is potentially then subject to further contractual restrictions even though the reason given for not prohibiting circumvention of copy-protected works was to allow fair use – but only once access has been secured.81 Licences for e-books typically have contained restrictions against reading the book aloud, for example. Lessig highlighted the absurdity and implications of some of Adobe System’s terms as early as March 2001.82 “It means”, Lessig said:

“…that we should be addressing the issues of copyright in cyberspace in light of the full range of values that copyright law is meant to protect – both the interest of the copyright

---

81 This danger was foreseen at the International Conference on the Management and Legitimate Use of Intellectual Property, Strasbourg, July 2000, organized by the Internal Market Directorate-General of the European Commission. Discussions in Panel 2 led to the conclusion that ‘many held the view that such examination [of contractual law aspects of exploitation of intellectual property rights] should also serve to avoid the substitution of intellectual property law by contract law.’ http://ec.europa.eu/internal_market/copyright/docs/conference/2000-07-strasbourg-conclusions_en.pdf (last visited January 16th 2007).
82 Lewis Carroll’s ‘Alice’s Adventures in Wonderland’ lies within the public domain, yet the terms that had previously been in force said ‘no text selections can be copied from this book to the clipboard’. ‘Alice in Wonderland’, March 19 2001, The Industry Standard.
holder, and the free flow of ideas.\textsuperscript{83} Both the interest against piracy and the interest to assure adequate access and fair use.”

True to his word, he\textsuperscript{84} initiated a new project, the Creative Commons,\textsuperscript{85} with this aim in mind.\textsuperscript{86} This created new digital licences, drawing on the open source model for software,\textsuperscript{87} both providing licence information easily to users, and operating as a clearinghouse for rights for a limited number of works.

In the UK, the Copyright Tribunal has jurisdiction over licensing schemes relating both to copyright and database right licensing schemes, as was illustrated by the \textit{ITV and BBC v Time Out} case. And the Database Directive prevents contractual limits on the extraction and use of insubstantial parts of a database.\textsuperscript{88} However, careful drafting may limit the uses permitted to the “lawful user”. The courts may be able to mitigate some of the effects of such drafting. In \textit{Royal Mail Group v I-CD Publishing} (2004),\textsuperscript{89} Lloyd J held that the licence granted by the claimant to use the Postcode Address File allowed for its use for validation by the defendant. The Royal Mail has a statutory duty to licence its rights in the database to third parties on reasonable terms.\textsuperscript{90} The court’s interpretation of the licence accepted that few databases will not be able to be PAF validated, but had the Royal Mail succeeded the consequences would have been far reaching. They were effectively claiming rights in all postal addresses in the database. As the vast majority of customer databases in the UK are PAF validated, the Royal Mail could have prevented their owners

\textsuperscript{83} Vaidhyanathan S, also argues for a balanced ‘thin’ protection for copyright and information in \textit{Copyrights and Copywrongs} (New York, New York Press, 2001).
\textsuperscript{84} Lessig fears the increasing technological control exercised over the Internet may prove an attack on the freedom to innovate, and expands his views arguing strongly for a public commons in \textit{The Future of Ideas}, (New York, Random House, 2001).
\textsuperscript{85} \url{http://www.creativecommons.org/} (last visited January 16th 2007).
\textsuperscript{87} \url{http://www.opensource.org/index.html} (last visited January 16th 2007).
\textsuperscript{88} Copyright and Rights in Databases Regulations 1997/3032, Reg 19(2); Database Directive, Article 8.
\textsuperscript{89} [2004] EWHC 286.
\textsuperscript{90} Postal Services Act 2000, s 116.
from exploiting those databases in which expense and effort had been invested.

The Outcome

The combined effect of the database right, and legal protection for digital rights management can be seen to have departed from the traditional balanced approach taken by intellectual property in general and copyright in particular. Even if a public database owner could argue that the profits from the database could ultimately be employed for the state’s benefit and therefore serve an economic and utilitarian purpose, this cannot be said to benefit the global right to access.

The dangers lie in the wide scope of the database right; if virtually all collections of works and data fall within the definition of “database”, the traditional balances served by copyright law can be bypassed; particularly if the limitations determined by the ECJ can be bypassed by careful corporate structuring and outsourcing.

Because many databases may be protected both by copyright and the sui generis right, it was pointed out in the 2001 NautaDutilh study commissioned by the European Commission that the safest option of users was to follow the narrower exceptions of the sui generis right, thus restricting access more than was perhaps intended. The study suggested that the exceptions should be co-terminous with those of the Information Society Directive and copyright. Most debate centred on educational and research uses.

---

91 Adopting a libertarian and Nozickian analysis, Cahir argues that there is no moral justification for copyright and that DRM and contract should replace it, allowing the market to regulate access as an efficient and effective regulation of information flow: Cahir J ‘The Moral Case Against Copyright Law in the Digitally Networked Environment,’ Presentation at the AHRB Network on New Directions in Copyright Law, 4 February 2004. However, this is to ignore the current undiscerning nature of TPM and evidence of monopolistic practices exercised by those with technological and contractual control. While the moral argument may be sustainable, current regulation of unfair contract terms in the face of inequalities of bargaining power, as well as the UK’s Copyright Tribunal’s jurisdiction over collective licensing suggests that market forces alone do not serve the interests of fair and just distribution of resources. It can also be argued that individual rights are violated in some cases, where TPM do not allow format-shifting by owners of works.


One of the main concerns that digitisation of work and data and online access to them has wrought lies in the erosion of the public/private use divide that could be drawn for an analogue work. For analogue works copying and use on a commercially significant scale was beyond the capacities of the ordinary home user. But once access is electronic wide-scale and good quality reproduction is available to all. While TPM are designed to prevent this, they cannot make nice distinctions between the commercial and private user. To apply them indiscriminately is, nevertheless, to prevent uses otherwise allowed in the analogue age.

**BRITISH HORSERACING BOARD v WILLIAM HILL**

This case concerned a database constructed as an aid to the claimant’s prime functions as the governing body for horseracing, rather than a database manufactured as their prime activity as the architects of databases or even suppliers of information. Nevertheless, its contents were widely published and in the public domain so that the finding of infringement was alarming.

Holding that the Directive’s definition of a database covered virtually any searchable collection of data, at first instance Laddie J, however, dismissed the investment related to creating data for inclusion in the database before its actual collection and insertion. That he was then prepared to find the remaining investment substantial enough to confer protection on the database is significant, given the later findings of the ECJ. It demonstrates the weakness of the ECJ’s attempt to limit protection for information. He said:

“In practice where one person both creates the underlying data and gathers it together, as BHB does, it may be difficult to draw a sharp dividing line between the two activities.”

---

94 *British Horseracing Board Ltd v William Hill Organisation* (2001) was the first case on the *sui generis* database right in the United Kingdom.

95 The database was made available to the public in different ways. Information was supplied to the industry daily on the joint Wetherbys/BHB website and by publication through weekly publication of relevant information in the BHB’s official journal, the *Racing Calendar*. Further publication to interested parties (bookmakers, the media) was through Racing Pages Ltd (owned by Wetherbys and the Press Association), which forwarded an electronic declarations feed to subscribers the day before a race. This provided an accurate and up-to-date list of races, declared runners and jockeys, saddle-cloth numbers, race distances, times and number of runners in each race. Data was also supplied to Satellite Information Services Ltd [SIS] who could use it for onward transmission to subscribers as a raw data feed.
Laddie J also refused the application of any copyright principles, such as the distinction between idea and expression, which might have served to allow facts within the database to enter the public domain.

William Hill appealed, and the Court of Appeal lifted the permanent injunction, nevertheless holding that there should be a reference to the ECJ on the interpretation of the Directive.96

Early indications from the ECJ were not encouraging. In her Opinion,97 Advocate General Stix-Hackl reaffirmed the Directive’s intention to protect the database and not information within it, as the object was to protect investment, not information. However, her opinion adopted wide interpretation of the Directive.98

The European Court of Justice

The European Court of Justice decided both the BHB and Fixtures Marketing99 references in November 2004. That they did not follow the wide interpretations of the Directive by the Advocate General may be seen as an

---

96 It then seemed unlikely that Laddie J’s wide interpretation of the Directive would be overruled on appeal as the court indicated their support for the decision.
97 BHB v William Hill Organisation (2004), Case C-203/02.
98 “Obtaining” was said not to include the generation of new data, but where the act of generation coincided with the collection and screening of data, protection would apply. She continued to say that the purpose for which a database was created did not affect the question whether it may be protected, so that databases created as a “spin-off” to an enterprise’s main activity were subject to the right. She therefore took the view that the registration functions performed by Wetherby’s as they generated the race information might fall within “obtaining” if “the creation of the data took place at the same time as its processing and was inseparable from it.” Verification, she said, applied to checking information within a database, and not to prior acts before information was included. She denied that Article 7 should be read in conjunction with the definition of a database so as to relate the taking of a substantial part to the method and arrangement of a database’s contents, thus taking the same view as Laddie J as to protection being confined to ‘databaseness’. Nor could recitals 45 and 46 (which deny protection to underlying information) be employed to that effect. ‘Extraction’ was interpreted to include permanent or temporary transfer of all or a substantial part of a database’s contents. It only applied to direct transfers. Substantiality was a qualitative and quantitative test. ‘Utilisation’ related to making a substantial part available to the public, and might be indirect. Rearranging such data would continue to infringe. Finally, she decided, protection for dynamic databases resulted in new protection for the whole database on a ‘rolling’ basis.
99 Fixtures Marketing Ltd v Svenska Spel AB, Case C-338/02, Fixtures Marketing Ltd v Oy Veikkaus Ab, Case C-46/02, Fixtures Marketing Ltd v OPAP, Case C-444/02.
indication that the fears regarding the effects of the *sui generis* right were seen to be real.

The organisers of English and Scottish professional football retain Fixtures Marketing Ltd to grant licences to exploit UK football fixture lists outside the UK. The fixture lists were collated electronically and in printed booklets, at an annual cost of some £7 million. The defendants, in Sweden, Greece and Finland, operated pools using data from the lists. They obtained the information from the Internet and newspaper sources, or from the football clubs, and were not licensed users of the Fixtures lists, having declined to take licences. Similar references were made by national courts on the interpretation of the Database Directive, and, like the BHB database the fixture lists might be regarded as “spin-off” activities not central to their creator’s main activities.

Unlike the results of the earlier UK *BHB* actions the ECJ took a more restricted view of the ambit of *sui generis* database protection, and did so by emphasising the Directive’s purpose to protect investment in the generation of databases as storage and processing tools for information, not the information itself. The four rulings are in cohesive terms. The result is to curtail the number of databases falling within the definition of a protected database, by narrowly interpreting the type of investment intended to be protected. This apart, the infringing acts are given a wide interpretation; with the result that, if the first narrow interpretation can be avoided by careful corporate structuring, database protection continues to plague the flow of information.

*The Definition of a Database*

In *Fixtures Marketing Ltd v OPAP* (2004) the Court considered the definition of a database. They held that it was irrelevant whether a database contains materials created by the database maker himself, or taken from other sources, nor was the fact that a database contained sporting information significant. What was important was to interpret the definition within the context of its purpose as defined in the Directive. Accordingly, protection was designed to encourage development of systems for storing and processing information. A database should therefore consist of a collection of independent materials, separable from one another without their informative value being affected. It is for this reason that a collection of audiovisual, cinematographic, literary or musical works does not fall within the definition. The requirement that the database contents be systematically arranged and individually accessible then presupposes a “fixed base” and

---

100 Database Directive, Recitals 10 and 12.
technical\textsuperscript{102} or other means\textsuperscript{103} to allow retrieval of independent items. They expressed the view that football league fixture lists fell within this definition.

*Investment in Obtaining and Verifying the Contents*

This too was give a purposive interpretation, so that it is not investment in the creation of the contents of a database that is required, but investment in resources to seek out independent materials and collect them.\textsuperscript{104}

Investment in verification of contents relates to resources used to ensure the reliability of information in a database, and to monitor the accuracy of materials collected when the database was created and during its operation. This must be distinguished from resources employed in verification when data is created and before subsequently being collated.

The Court was not prepared completely to exclude “spin-off” databases from protection. However, where a database’s creation is linked the database maker’s principal activity of creating the data, they emphasised that only substantial investment in obtaining and verifying the data as part of creating the database, and not its creation, could be considered relevant:

“…the collection of those data, their systematic or methodical arrangement in the database, the organisation of their individual accessibility and the verification of their accuracy throughout the operation of the database…require substantial investment in quantitative and/or qualitative terms…”

Consequently resources invested in selecting the horses to run in certain races, and the checks made before entering runners on the list, related to creation of data for the lists in the BHB database in the ECJ’s view. In the same vein the ECJ held that the resources used to establish the dates, times and team pairings for football league matches could not be taken into account in the *Fixtures Marketing Ltd* references.

\textsuperscript{102} Such as electronic, electromagnetic or electro-optical processes.
\textsuperscript{103} Such as an index, table of contents, or plan or method of classification.
\textsuperscript{104} Database Directive, Recital 39. They said:

“The purpose of the protection by the sui generis right provided for by the directive is to promote the establishment of storage and processing systems for existing information and not the creation of materials capable of being collected subsequently in a database.”
Extraction and Re-utilisation

Purposive interpretation was again applied to the acts of extraction and re-utilisation, which extended to acts harmful to a database maker’s investment\(^\text{105}\) in forming the database:

“…the *sui generis* right has an economic justification, which is to afford protection to the maker of the database and guarantee a return on his investment in the creation and maintenance of the database.”

The acts themselves are to be widely interpreted as any act of appropriating the results of the database maker’s investment\(^\text{106}\) and making it available to the public. It is irrelevant that an unauthorised act is for the purpose of creating another database, whether in competition or not, and of the same or a different size. Nor is it relevant that the act is for a different purpose altogether, commercial or non-commercial. The ECJ also reaffirmed that unauthorised acts need not be direct as indirect taking would equally jeopardise the protected investment. Consequently, the potential for rights over data itself remains.

However, the prohibition against extraction and re-utilisation does not extend to consulting a database if access has not been otherwise restricted. If a database maker authorises another to re-utilise the contents of his database his consent to making those contents available to the public is implied, creating an alternative means of access to the information. But if the database maker’s consent only extends to consultation, it does not entitle the user to extract or re-utilise the information in the whole or a substantial part of the database. Only insubstantial part may be extracted or re-utilised.

The same applies even where the database maker has made his database available to the public unless one of the exceptions applies. Consequently, even though the BHB database was made available to the public, William Hill was not entitled to extract or re-utilise a substantial part without authority. This they had done by transferring BHB data from one medium to another, integrating the data into their own system, and re-utilising it by making it available to the public on the Internet.

\(^{105}\) Database Directive, Recitals 42 and 48.

\(^{106}\) Depriving him of the revenue which should have enabled him to redeem the cost of that investment. One assumes that the ECJ did not intend that database maker’s should not profit from their investment.
Substantial Part

Whether a part is substantial quantitatively or qualitatively depends on the prejudice caused to the substantial investment in the database’s creation by its maker. Quantitative evaluation of a substantial part relates to the volume of data taken assessed in relation to the volume of the whole. Qualitative evaluation refers to the scale of investment in the obtaining, verifying and presenting of the extract’s contents regardless of whether it is quantitatively significant in terms of the whole. Therefore a “quantitatively negligible part of the contents of a database may in fact represent, in terms of obtaining, verification or presentation, significant human, technical or financial investment”.

The intrinsic value of individual items of information themselves is not a relevant factor, as the directive does not provide protection for the information itself\(^{107}\). Consequently, BHB’s argument that without the information which William Hill had extracted, races could not run was not a relevant consideration in deciding whether the taking was substantial. Quantitatively it was insignificant, and the investment adverted to had been expended in creation of the data, not its insertion into database form. It was not therefore extraction and re-utilisation of a substantial part in the ECJ’s eyes.

Repeated Insubstantial Taking

The ECJ emphasised that the provision against repeated insubstantial taking is intended to prevent the acts of taking a substantial part being circumvented. It is to prevent repeated and systematic taking the cumulative effect of which “would be to seriously prejudice the investment made by the maker of the database” in the same way that taking under Article 7(1) of the Directive would. The insubstantial taking would therefore have to lead to the recreation of the whole or a substantial part of the database, whether or not the taking was intended to create a second database. They found that William Hill’s taking was not intended to circumvent Article 7(1).

Dynamic Databases

The ECJ did not address the Court of Appeal’s eleventh question, and this point remains moot.\(^{108}\)

The Court of Appeal applied the ECJ’s ruling,\(^ {109}\) holding that the BHB’s database did not fall within the right. Jacob LJ founded his decision on the

---

\(^{107}\) Database Directive, Recital 46.
\(^{108}\) BHB v William Hill (2005) C.A.

112
fact that the published database did not consist of “existing independent materials” because until the BHB gave their stamp of approval to the race lists, effectively there was no information at all to be collected. However, Pill LJ draws attention to paragraph 38 of the ECJ’s judgment, where they state:

“...investment in the selection, for the purpose of organising horse racing, of the horses admitted to run in the race concerned relates to the creation of data which make up the lists for those races which appear in the BHB database. It does not constitute investment in obtaining the contents of the database. It cannot, therefore, be taken into account in assessing whether the investment in the creation of the database was substantial.”

The conclusion might be drawn that had the BHB pleaded investment in the actual creation of the database itself, the result might have been different unless Jacob LJ’s reasoning is accepted.

Commentary

The ECJ were clearly concerned about criticism of over protection for sole source databases resulting from the Database Directive, and sought to employ the “spin-off” doctrine to reduce the new right’s impact, as had some national courts before them. They did so by attempting to restrict the protection of the right to the investment required to design and construct a database “around” pre-existing contents, leaving the creation of those contents unprotected, and their re-use in the public domain. They also linked the infringement provision to the qualifying substantial investment criterion, so that it is apparently the act of building databases that receives the right, and not the contents. However, it seems that this may be easily avoided by careful business planning and accounting.

The BHB had invested in creation, not collation, and thus received no protection from the right. William Hill had not taken a quantitatively or

110 However, Juliet Jenkins suggests that the ECJ’s restriction of protection to independent materials whose informative value must not be affected by separation is to go a step too far. She argues that the informative value of both interrelated and interdependent materials may be affected by separation (in both cases the material’s collected value will exceed that of its individual elements), but that Recital 17 of the Database Directive suggests that it was intended to exclude interdependent materials, but not interrelated content; Jenkins J ‘Database Rights’ Subsistence Under Starter’s Orders’, [2006] JIPLP 467.
PROTECTING DATABASES

qualitatively substantial part, even though the information was vital to organisation of horse races. Nor did their systematic use create the danger that William Hill could recreate the BHB database.

In the Future Fixtures cases, the ECJ discounted investment in the verification undertaken while the fixtures lists were being drawn up as this amounted to creating data; the same was true even of amendments to the lists during the season to reflect changes to the schedules as it was not “substantial investment”.

Substantial investment in presentation was stated to be that which gave a database its information processing functions – the information’s arrangement and accessibility. As the investment in presentation was too closely related to the creation of the fixture lists, this too was discounted. Hugenholtz describes presentation as “the retrieval and communication of …compiled data, such as the digitalisation (scanning) of analogue files…or the design of a user interface”, although the Database Directive itself makes clear that merely placing songs on a CD will not amount to substantial investment. In Berlin Online digitisation coupled with selecting, updating and verifying the property advertisements did constitute substantial investment, but this predated the ECJ decisions and should be contrasted with the Dutch case of Algemeen Dagblad BV/Eureka Internediensten.

There is a significant weakness in the ECJ’s approach. It would appear that these results can be evaded – by distinguishing the entities or undertakings creating information, and those creating the database, or at least to record their investment separately. Separate investment in verifying content might suffice to satisfy the investment requirement, particularly if the creation of that content is undertaken by a different concern. Chronological distinctions in budgeting may also help to allocate investment to database manufacture as opposed to data creation. Third parties may be employed to create the database. As Hugenholtz says, “[a]dmittedly, such investment will not be difficult to achieve, and producers of sole-source databases will be

---

112 Database Directive, Recital 17.
113 Berlin Online, Landgericht, Berlin, 08.10.1998.
114 Algemeen Dagblad BV/Eureka Internediensten, Ordinary Court of First Instance, Rotterdam, 22 August 2000.
quick to realise this". Additionally, the narrower infringement provision can be avoided by constructing smaller databases, so that what is taken is quantitatively substantial. Nor will the limitations imposed by the ECJ affect databases not involving “created” data, such as the human genome database held by Celera or the databases held by large scientific publishers such as Reed Elsevier.

It will be harder to claim the right, or that it has been infringed. Database manufacturers will need to document their processes carefully, and allot separate budgets so as to distinguish investment in creation of information, and investment in collation and database creation. However, it would seem that database manufacturers may be able to organise their operations so as to avoid the major restrictions imposed by the ECJ.

The distinction between the creation of information and investment in obtaining, verification and presentation of contents seems an artificial one. One wonders what the result might have been had the horse owners contacted the BHB rather than the BHB them. Any line between the creation and gathering of information must be a fine one. Had the BHB contracted out the call centre, but then engaged on gathering and verifying the data generated there and invested in that, again the result might be very different. One can only suppose that database manufacturers hoping to exploit “spin-off” information will construct their undertakings accordingly. The BHB must have had a very considerable set-up investment for the database, independent of the continued maintenance of the operation to provide the annual lists. It seems that the limitations the ECJ hoped to create in order to meet criticism of

---


115
the right’s scope and effect on access to information might be very easily avoided with some pre-planning.

The Commission’s report notes that commentators have read the ECJ rulings as a major blow to the funding plans of sports bodies planning to generate income from exploiting data generated during the course of their activities. Consequently, it is likely that database makers will look for, and possibly find, ways of evading the ECJ’s result, probably by securing databases to access control. And it is clear that the ECJ’s rulings contemplate a pay-per-view model for information in databases through the combined effects of the database right and the use of technological protection measures.

THE COMMISSION’S REPORT

The Commission’s original proposal for a directive provided that compulsory licensing should apply to the *sui generis* right. Licences were to be granted on fair and non-discriminatory terms when the information contained could not be independently created, collected or obtained from any other source; the database had to be publicly available and Member States had to provide for adjudication for the grant of licences. This provision was removed in a compromise reached with the Council. As this was controversial, *inter alia*, Article 16 requires the EU Commission to report to the European Parliament, the European Economic and Social Committee and the European Council on the application of the directive.

Preliminary Report

In December 2005 the Commission issued a first evaluation of the directive. The outcome was ambivalent at best, and further consultation was

---

120 The BHB was hoping to generate more than £100 million a year by licensing sporting data. Football’s governing body will also lose substantial revenue if fixture information cannot be licensed.


122 Article 16, Database Directive:... *inter alia*,...it shall examine the application of the sui generis right, including Articles 8 and 9, and shall verify especially whether the application of this right has led to abuse of a dominant position or other interference with free competition which would justify appropriate measures being taken, including the establishment of non-voluntary licensing arrangements.

sought from stakeholders by 12 March 2006 before recommendations being made on the four policy options mooted in it. The Commission’s report was also preceded by an extensive study, commissioned from NautaDutilh, of the extent of implementation, and of reaction to database protection.

Broadly, the analysis can be divided into its study of the legal effects of the directive’s measures, and of its economic effects. Both analyses aim to evaluate whether the policy aims of the Directive have been achieved. These are stated to be: (i) harmonisation of Member States’ copyright rules; (ii) safeguarding the investment of database makers; and (iii) ensuring that legitimate users’ access to information is secured.

Economic

The survey of the database industry showed no clear indication of a positive effect on competitiveness from the *sui generis* right. There were clear difficulties in securing relevant data, forcing the reporters to measure the industry by the number of databases produced. They made reference to the Gale Directory of Databases (the GDD) and measured the number of changes of entry in the GDD. Yet there is no necessary correlation between the Database Directive definition of a database with an entry in the GDD, and products such as newspapers, magazines and electronic programme guides which fall within the directive may not fall within the directory. So, while the GDD shows no growth in the European industry, the Commission argued that these figures are potentially inaccurate in the face of new media for databases and that no firm conclusions as to the impact of the directive could be drawn.

---

126 This is the largest existing directory of databases and contains statistics indicating the growth of the global database industry since the 1970s. It is renewed twice annually, obtaining its information from producers.
127 The GGD shows that in 1998 the number of EU-based database entries was 3092, while in 2004 it was 3095. They do not note whether this included the 10 new members of the EU in 2004. In fact, just as the directive was enacted in most member States in 2001 the number of databases was 4085. Consequently one conclusion that might be drawn is a drop in competitiveness after the directive came into force. But it must be noted that the GDD does not allow measurement of overall turnover, nor of the information supplied by databases.
In the face of the perceptions of those within the industry of benefits gained from the directive, the report concluded that no change should be made now. This perception included the belief that the new right had helped Europe to catch-up with the US database industry, yet the ratio of European/US database production was nearly 1:2 in 1996 but 1:3 in 2004.

These conclusions are open to challenge. James Boyle illustrates the lack of economic benefit from the right by pointing out that the US database industry thrives, despite the lack of protection for facts and unoriginal compilations of facts. In fact, the European companies Reed Elsevier and Thomson Publishing only entered the legal database market in the US after the *Feist* case, but maintain high rates of return. He concludes that while the European industry did get a temporary boost after the Directive, growth rates have returned to pre-directive levels, and that the industry faces the anticompetitive costs of database protection. Nor do the cases concerning database protection indicate databases that would not otherwise have been created, as they concern information generated for and by businesses. What is clear is that policy cannot be safely formulated without economic evidence, and that none of any analytical value has yet been proffered.

---

128 The Commission made a restricted online survey of 500 European companies and organisations involved in the database industry and received 101 replies. 75% of respondents were aware of the new right, of them 80% felt protected and 90% believed that protection a EU as opposed to national level was ‘important’; while 65% believed that legal protection is now higher than before harmonisation.


Legal

The report acknowledges the ambiguities and lack of clarity in the undefined novel concepts applied to the database right by the Directive, and the problems this has given courts, resulting in diverse interpretations and results in Member States national courts. The report broaches the criticism that the directive “locks up” information, and takes the ECJ rulings into consideration, asking whether the directive triggers unnecessary costs in securing access to information.

The NautaDutilh study also pointed out that the scientific community distinguish between the nature of commercial and scientific databases, the bulk of investment in the latter coming from the scientific investigation and obtaining of facts and data, and not in their subsequent “databasisation”, suggesting that the same principles cannot be applied to both.

The Commission’s Conclusions

The report acknowledges problems with the *sui generis* right from the outset. Yet, despite its ambivalent findings, the ultimate conclusion is that repeal of the directive as a whole, or just of the *sui generis* provisions within it, would be both resisted by the database industry and reawaken the earlier debates over the standard of copyright originality. This seems a perverse conclusion in the light of evidence that the directive has not led to growth in the database industry, and the evident need the ECJ felt to limit the scope of the new right.

The value of surveying only the views of the database industry in an attempt to gauge whether the directive has served its avowed ends can be called into question as a one-sided exercise; particularly given the declared aim of securing a balance of protection and access. The views of the scientific, academic and research communities were not sought, neither are the views of library and consumer constituencies represented. Nor do the ECJ rulings broach all of the criticisms made of the right, while the time scales involved in securing judicial interpretation of the directive suggests this is not a real “fix”.

The report’s analysis finishes with three conclusions. Firstly, that the *sui generis* right is difficult to understand. Despite the Commission’s confidence in the ECJ rulings as a means of clarification, they conclude:

“It can be expected that database makers will devise legal strategies to get around the distinction drawn by the ECJ judgements and that this might result in online databases increasingly being secured by systems of access control.”
Secondly, that the *sui generis* protection does come close to protecting data as property as is illustrated by the ECJ’s distinction between creation and obtaining data. And they draw attention to the paradox that the US, having rejected the “sweat of the brow” approach to protection of compilations, has seen considerable growth in database production, while the introduction of the *sui generis* right has apparently had an opposite effect:

“With respect to “non-original” databases, the assumption that more and more layers of IP protection means more innovation and growth appears not to hold up.”

Thirdly, the economic impact of *sui generis* right is unproven. What evidence there is suggests no benefit has been achieved, yet industry perceptions support a need for the right. Consequently it must be asked whether the report’s statement:

“While this endorsement of the *sui generis* right is somewhat at odds with the continued success of US publishing and database production that thrives without *sui generis* type protection, the attachment to the new right is a political reality that seems very true for Europe…”

is logical or can be supported.

The Commission appear to recognise this by seeking further consultation on four options: repealing the whole directive, withdrawing the *sui generis* right, amending the *sui generis* provisions, or maintaining the status quo before going on to take any action. Consequently, the report can be viewed, at best, as merely an opener in continuing debate as to the fate of the *sui generis* database right, and one with flawed data and analysis.

**CONCLUSION**

The combined effect of the new database right, and legal protection for digital rights management can be seen to have departed from the traditional balanced approach taken by intellectual property in general and copyright in particular. Even if a public database owner could argue that the profits from the database would ultimately be employed for the state’s benefit and

---

133 By the industry responses to the online survey.
therefore serve an economic and utilitarian purpose, this cannot be said to benefit the global right to access to information.134

The danger lies in the wide scope of the database right; if all collections of works fit the definition the traditional balances served by copyright law can be bypassed; particularly if the limitations determined by the ECJ can be bypassed by careful corporate structuring and outsourcing.

So far the Commission have not suggested removal of the right altogether, and their comment on this option appears to suggest a reluctance to do so. Nor have the ECJ produced either clarity of interpretation, or a route to access for information of significant social value. The results of the extended consultation have been briefly summarised on the EU’s Europa website, but no hint of further action is given.135 The result is that neither the ECJ, nor the Commission have come any way towards meeting a need for access rights to compiled information. But there is another approach.

It has been argued136 that to remove protection altogether might remove the incentive to create sole source information in the first place; although this is questionable in the light of the large American database industry, reliant, as it is, on other means of protection. Nor would removal of the database right remove the combined effects of contractual and technological protection which have the same potential in relation to access. Consequently another solution, if such access is a real need, must be found. It would seem that attention should shift from the question of the existence or absence of protection, leaving this issue to the directive and the courts, and turn to means of guaranteeing access as the price for the privilege of database protection. Controls over database licensing are urgently needed.

135 Of 55 responses received, 31 could be clearly identified as being from producers, 13 from academics and 8 from users. Only 8 favoured Option 1, and 3 Option 2. Opinion was equally divided between amendment of the right (Option 3), and maintaining the status quo (Option 4), with 26 ‘votes’ apiece: http://ec.europa.eu/internal_market/copyright/prot-databases/prot-databases_en.htm (last visited January 16th 2007).