

An economic analysis of the contractual protection of databases

*Estelle Derclaye

AN ECONOMIC ANALYSIS OF THE CONTRACTUAL PROTECTION OF DATABASES 1

INTRODUCTION.....	1
1. ECONOMIC ANALYSIS OF INVESTMENT IN DATABASE CREATION.....	2
2. CONTRACTUAL PROTECTION OF SUI GENERIS RIGHT-PROTECTED DATABASES	7
2.1. Multiple source databases	9
2.2. Sole source databases	10
3. CONTRACTUAL PROTECTION OF DATABASES NOT PROTECTED BY SUI GENERIS RIGHT	12
3.1. Multiple source databases	12
3.2. Sole source databases	13
CONCLUSION	14

Introduction

This paper attempts to answer two questions. First it is concerned with the question whether a database producer can, and if so he should, get additional protection for his *sui generis* right-protected database by contract. In other words, the question is whether he can and if so, should be allowed to override the limits of the *sui generis* right by contract. Second it is concerned with the question whether a database not protected by the *sui generis* right, either because it was protected but is now fallen in the public domain or because it does not meet the requirements to be protected by the *sui generis* right can and if so, should, be protectable by contract. The central question underlying these two questions is whether such use of contracts is overprotective of databases. To determine this, an economic analysis is followed. Overprotection is protection over and above what is efficient economically. This means that overprotection reduces social welfare. Where necessary, the human rights to information and to privacy are also taken into consideration.¹ There have been no studies made of this specific question (i.e. whether overriding the *sui generis* right's limits overprotects the database producer's investment in making the database). However, an essentially legal study of this problem has recently been made in the field of copyright, albeit limited to copyright exceptions and not all its limits.²

A brief presentation of the main features of the *sui generis* right is in order.³ Investment in database creation is protected in the European Union by a specific

*LL.M., D.E.S., Lecturer in intellectual property law, Queen Mary Intellectual Property Research Institute, Queen Mary, University of London. Paper presented at the SERCIAC 2005 in Montreal (www.serci.org). This is a work in progress. The author welcomes comments and can be reached at e.derclaye@qmul.ac.uk

¹ Note that a full-blown analysis of why these two human rights should be taken into consideration is outside the scope of this paper whose focus is on whether contractual protection of databases is efficient economically. However, the author wished to mention the human rights approach to database right briefly as it is as important as the economic approach. She explores this issue in a forthcoming publication.

² L. Guibault, *Copyright limitations and contracts, An analysis of the contractual overridability of limitations on copyright*, Kluwer Law International, 2002, p. 14 (further referred to as "Guibault").

³ A comprehensive review of the general normative question of the adequacy of the *sui generis* right as a right to protect databases is outside the scope of this paper. The author explores this issue in a forthcoming publication. The study will therefore mainly concentrate on positive law.

intellectual property right: the database *sui generis* right. This right was created by a 1996 Directive⁴ which had to be implemented in the Member States by 1 January 1998. The *sui generis* right is very close to the British sweat of the brow copyright which existed in the UK for databases before the implementation of the Database Directive (“the Directive”). The Directive replaced the UK sweat of the brow copyright by “creativity copyright”. Since then in the EU, copyright does only protect a database’s original structure and not its contents. The *sui generis* right protects investment in database creation and thereby the contents rather than the structure of the database. As long as the database maker proves that he made a substantial investment in the obtaining (collecting), verifying or presenting of the data contained in the database⁵, he will get *sui generis* protection for 15 years.⁶ This protection enables him to prevent anybody from extracting a substantial part of the contents of its database and reutilising it (making it available to the public).⁷ Implicitly this means that extracting or reutilising insubstantial parts of the database does not infringe.⁸ However, the taking of insubstantial parts which amounts to a substantial part of the contents of the database also infringes the database maker’s *sui generis* right.⁹ There are some limitations to the scope of the rights, namely it is not an infringement to extract a substantial part of a non-electronic database for private purposes, to extract a substantial part for teaching or research purposes and to extract or reutilise a substantial part for the purposes of public security or an administrative or judicial procedure.¹⁰ These exceptions are optional: Member States are not obliged to implement them in their national laws. Additionally, like with other intellectual property rights, once the database maker puts copies of the database on the market, the *sui generis* right is exhausted. The database maker cannot further control the subsequent sales of the copies of the database he put on the market. The *sui generis* right is an anti-copying right, like copyright. Anyone can therefore collect the same data and make the exact same database independently (i.e. without copying from the previous identical database). The limits of the *sui generis* right are therefore: the non-protection of insubstantial parts, the exceptions to the rights, the exhaustion principle and the term.

The paper will first make an economic analysis of investment in database creation. Then with the principles identified from this analysis it will address the two questions explained above.

1. Economic analysis of investment in database creation

Databases are information goods. They have been traditionally classified as literary works and protected in many countries by copyright. Depending on the country, only the structure or also the contents were protected by copyright. The economic analysis of copyright can therefore apply to them with some adjustments. First the basic

⁴ Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases, OJ, L 77/20, 27th March 1996 (“DBD”).

⁵ Art. 7 DBD.

⁶ Art. 10 DBD.

⁷ Art. 7 DBD.

⁸ See also art. 8 DBD.

⁹ Art. 7.5. DBD.

¹⁰ Art. 9 DBD.

economics of information goods is explained.¹¹ Then this analysis is extended to copyright in particular. Finally, the economic analysis of copyright is extrapolated and adapted to investment in database creation.

Information goods are public goods. This means they are both non-rival and non-excludable.¹² Non-excludability is the impossibility to prevent the consumption of the good by anyone even if people do not want to pay for it. Thus the good benefits everyone. Since exclusion is impossible, the price system cannot be used because consumers have no incentive to pay. Non-payers will get a free ride. Consequently, if a sufficient number of consumers do not pay, the good will not be produced because it is not worth it, since the investment in making the good cannot be recouped. Because of their characteristic of non-excludability private companies will not produce public goods or will under-produce them (i.e. produce them at sub-optimal quantities).

A good is non-rival when the consumption of the good by one individual does not diminish the quantity which remains available for others.¹³ Television or radio transmission, any performance in front of an audience (fireworks, film, ballet, theatre...) are typically non-rival goods: having one more viewer does not involve an additional cost even if the fact that there is an additional viewer means there is additional consumption taking place. Because “the socially optimal price of a non-rival good or service is equal to the marginal cost of consumption – e.g. zero – private supply of the good is likely to be unprofitable”.¹⁴ Therefore even though it is possible to produce non-rival goods, private companies will produce sub-optimal quantities.

Thus the production and consumption of public goods is characterised by over-consumption (free riding) and underproduction (i.e. production below the socially optimal level). This leads to a non efficient allocation of resources, which is also called market failure.¹⁵ When there is market failure it is justified for government or even the producers of the good themselves, if they can, to intervene to remedy it and achieve optimal supply of public goods. There are several ways of achieving this: the production of information goods can be given to public authorities which can finance such production through taxes. However, this solution is not adapted (at least generally) because in a democratic society works must be made out of the control of the state. Another way is to use technical devices to render the goods private. With digital technology it is easier to control access to works so that information goods can become more private than public.¹⁶ However as recent decisions have shown¹⁷,

¹¹ We choose to follow the Chicago School of Economics. For an explanation, see A. Strowel, *Droit d'auteur et copyright - divergences et convergences*, Bruxelles/Paris, Bruylant/LGDJ, 1993, p. 192 (further referred to as “Strowel”).

¹² K. Arrow, “Economic welfare and the allocation of resources for inventions”, in R. Nelson (ed.), *The rate and direction of economic activity: economic and social factors*, Princeton University Press, Princeton NJ, 1962; F. Levêque & Y. Ménière, *The Economics of Patents and Copyright*, Berkeley Electronic Press, 2004, available at <http://ssrn.com/abstract=642622> (further referred to as “Levêque & Ménière”); N. Mankiw *Principles of economics*, 3rd ed., Thomson, 2002, p. 224 (further referred to as “Mankiw”).

¹³ Levêque & Ménière, p. 4.

¹⁴ Guibault, p. 14.

¹⁵ Mankiw 2002, p. 11, 154.

¹⁶ Strowel, p. 204-205.

¹⁷ See e.g. *Universal City Studios, Inc. v. Corley*, 273 F.3d 429 (2nd Cir. 2001) (several motion picture studios brought suit against the defendant for posting on the internet a computer program (called DeCSS) which decrypted digitally encrypted movies on DVDs).

technological protection devices are not infallible and can be cracked so that the privatisation efforts of their information goods by the holders of intellectual property rights are not perfect and therefore state intervention through law (intellectual property law and the legal protection of technical devices which protect intellectual property-protected material) is still necessary to sanction infringing uses. So far enacting intellectual property rights such as patent, copyright or the database *sui generis* right is the best mechanism to allow creators to appropriate the fruits of their labour and makes private production of such information goods possible at a better level of production for society. This production at a better level enhances social welfare. Intellectual property law makes information goods excludable.

Based on this general economic analysis of intellectual property rights, in what remains the landmark article on the economics of copyright, Landes & Posner analyse copyright economically and try and determine what its optimal scope should be.¹⁸ Landes and Posner do not explain the effect of contracting out of copyright limits but explain why those limits make sense economically and what effects there are when those limits do not exist. They show and explain why without the limits to copyright, social welfare decreases. The conclusions of their analysis can be summarised as follows. Monopolies on ideas create welfare loss. If every new author has to come up with an original idea of his own because he cannot use the idea of others, it takes more time and effort to create a work, hence the number of works is reduced.¹⁹ This reduces social welfare.²⁰ In general, as far as uses of the work are concerned, if any borrowing of the expression of a work is completely forbidden, the number of works will decrease.²¹ Book reviews quoting brief passages of a work, should be allowed. Even if publishers would be better off if they could act against unfavourable reviews, this would be to the detriment of consumers of books.²² For other uses of works by users, they distinguish between *productive* and *reproductive* uses. Productive uses (as opposed to reproductive use) lower the costs of expression²³ and thus reduce the cost of creating new works, thereby increasing the total number of works. Reproductive uses reduce the demand for the protected work. For instance, if a parody reduces the demand for the original work, then it should be infringing and not fair use.²⁴ It is

¹⁸ W. Landes & R. Posner, "An economic analysis of copyright law" [1989] 18 J.Leg. Stud. 325 (further referred to as "Landes & Posner"). For other similar analyses, see M. Lehmann, "The theory of property rights and the protection of Intellectual and industrial Property" [1985] IIC 525; M. Lehmann, "Property and Intellectual Property - property rights as restrictions on competition in furtherance of competition" [1989] IIC 1; A. Quaadvlieg "The economic analysis of intellectual property law", in W. Korthals Altes, E. Dommering, p. B. Hugenholtz, J. Kabel (eds), *Information Law Towards the 21st century*, Kluwer 1992, p. 379 ff. (review and critique of the economics of intellectual property literature); R. Van Den Bergh, "The role and social justification of copyright: a "law & economics" approach" [1998] *IPQ*, p. 17.

¹⁹ Landes & Posner, p. 348; see also E. Mackaay, *An economic view of information law*, in W. Korthals Altes, E. Dommering, p. B. Hugenholtz, J. Kabel (eds), *Information Law Towards the 21st century*, Kluwer 1992, p. 56-57.

²⁰ They think this is what happens rather than an increase in price like in monopolies where both effects occur (reduction in the number of goods and increase in price). They note that in a more complex model, the price of works would raise if ideas were protected.

²¹ Landes & Posner, p. 360.

²² Landes & Posner, p. 359.

²³ The costs of expression are opposed to the costs of production. The former include the cost of creating the work (the author's time and effort) "plus the cost of the publisher of soliciting and editing the manuscript and setting it in type". Landes & Posner, p. 327. The costs of production are the costs of printing, binding and distributing individual copies. *Ibid.*

²⁴ Landes & Posner, p. 360.

uncertain whether the law has struck the right balance but it recognises the problem, since ideas are not protectable and substantial rather than simple similarity is required for infringement.²⁵ Finally, the economic rationale for limiting the duration of copyright is to reduce on the one hand, monopoly profits and on the other, tracing costs. The longer the term the fewer the number of works in the public domain and thus the higher the costs of expression will be, and therefore the lesser the works produced.²⁶ Again social welfare is not enhanced.

Their analysis does not give the exact scope of copyright, as far as the exceptions and the term are concerned. As regards exceptions, Landes & Posner's conclusion as to reproductive uses (which should not be permitted) is rational economically. However, this conclusion does not fully take into account several superior interests in a democratic society in front of which the right of the creator must bend. Productive uses include quotation and to some extent criticism (as is shown in their example concerning book reviews). Therefore such copyright exceptions are economically efficient. Incidentally they allow freedom of speech. News reporting, parody and private copying can be said to be reproductive uses and thus under their analysis, must remain infringing uses. However, to respect freedom of speech (which includes the right to impart and receive information) and the right to privacy which underlie these limitations²⁷ and which are constitutionally recognised in Europe²⁸, these uses must be allowed. The human rights dimension can here provide guidance and nicely complement the economic analysis. The intrusion of the human rights argument does not mean that the reproduction can always be made for free, without compensation of the right holder. In fact, economic analysis would surely have it that if they cannot be restrained by the copyright holder, such uses must be subject to compensation. There are several ways of achieving this aim: the lawmaker can provide a compulsory licence or a statutory licence. In the first case, the user has no right to make use of the work without the prior authorisation of the right owner, the rights holder is obliged to contract with the user (a duty to grant a licence to those users who request one) and the price is determined through negotiations. If the negotiations break down, resort is had to a third party. Under a statutory licence, the user is free to use the work without authorisation provided he pays a price (generally predetermined in the statute, e.g. for private copying a tax on recording media or internet connections can be provided).²⁹ The same analysis can be made and the same solution envisaged for other important interests that deserve protection in a democratic society such as the dissemination of knowledge or facilitation of public access to information and culture.³⁰ Some reproductive uses which embody those interests are allowed in copyright legislations: e.g. uses by educational institutions, libraries, archives, museums, persons suffering from a handicap and uses for the needs of justice and of the state. In sum, those

²⁵ Landes & Posner, p. 361.

²⁶ Landes & Posner, p. 362.

²⁷ Most certainly the exceptions for reporting current events and criticism or review are grounded in promotion of free flow of information. See F. Macmillan Patfield, "Towards a reconciliation of free speech and copyright", in E. Barendt, S. Bate, J. Dickens & T. Gibbons (eds), *Yearbook of media and entertainment law*, 1996, p. 213 citing S. Ricketson, *The Berne Convention for the protection of literary and artistic works: 1886-1986*, Kluwer 1987, p. 501.

²⁸ Art. 8 and 10 of the European Convention for Human Rights of 1950.

²⁹ See Guibault, p. 25.

³⁰ T. Vinje, "Copyright Imperilled" [1999] EIPR p. 193 (further referred to as "Vinje"); M. Buydens & S. Dusollier, "Les exceptions au droit d'auteur: évolutions dangereuses" [2001] *Communication Commerce Electronique* p. 13 (further referred to as "Buydens & Dusollier").

reproductive uses must be allowed to respect these superior interests. Whether they should be allowed at a price or for free is a question beyond the scope of this article. The article is only concerned with the question whether the limits can be overridden by contract or not.

From an economic point of view, investment in database creation is broadly similar to creation of copyright works. If someone creates a database at a cost (investment), this person ought to be protected against copying of the contents of the database (information). If not, since the contents of the database (information) are a public good, there will be underproduction of databases. The economic analysis of copyright law can thus be applied to investment in database creation. First in order to get protection, there must be an investment. If there is no cost in producing the database, there is nothing to protect. Productive use of the data comprised in the database should be allowed while reproductive uses should be forbidden, except those which protect freedom of speech, privacy, dissemination of information and other superior state interests. Finally, since the protection must be temporary to avoid the negative effects of monopolies in static situations, protection must be limited in time. In addition, after a period of time, the investment is normally recouped and there is no reason to continue protecting the result of the investment (reflected in the database contents). No incentive is granted anymore but rent-seeking is promoted.

The *sui generis* right presents however two major differences with copyright depending on the type of database protected. First let us look at copyright. Copyright only protects original expression. By definition, because it is created by man, original expression is unique. Every novel, music, film etc. will have its own unique original expression. It is extremely difficult if not impossible for someone to come up with the identical song or story independently. In other words, it will be an uphill struggle for a second creator whose work is identical or very similar to the first created work to prove that the work he created was made independently if the first created work was previously accessible to the public. So by definition, every copyright holder holds an economic monopoly on its creation because every original expression is by definition created by man and not pre-existing. With this monopoly he can prevent anyone from copying his original expression, albeit neither the ideas nor the unoriginal expressions behind his work. This monopoly is not very powerful since it does protect neither ideas, nor information, nor facts nor unoriginal expressions; however it exists and can lead to abuse. Therefore such potential abuses must be prevented. Solutions have been proposed by L. Guibault some of which we will consider later (in section 2.2).

How does protection of investment in database creation differ from copyright? Copyright creates only one situation: economic monopoly. With the *sui generis* right, two different situations resulting from two different types of databases can be distinguished: multiple source databases and sole source databases. Let us first look at multiple source databases. A multiple source database is a database made of pre-existing public domain data that the database producer collects. The database maker has no economic monopoly. Anyone can make the exact same database independently by collecting the exact same elements in the public domain and it will be easy for a second database producer to prove he himself invested in making his database without copying; he just has to keep records of his investments in collecting, verifying or presenting the data. In this case, the situation is thus totally different from the situation in copyright law and the copyright reasoning and solutions found for

copyright cannot be applied in their entirety. Under Landes and Posner's analysis, ideas must not be monopolised because it reduces social welfare. They do not make the same reasoning for raw information or facts. But by analogy, it can be safely said that granting a monopoly on facts or information also reduces social welfare. Here however the intellectual property protection does not grant a monopoly on facts or information. Thus no problem of welfare loss exists. Protection therefore should be granted under the same conditions as for copyright to producers of such databases.

What about sole source databases? In this case, the database is made of created data. This data is not pre-existing but it is produced by the database maker himself. Sole source information like ideas exists in only one exemplar: if a piece of information is created by its creator, it is unique, like when a singular idea is created by an individual. In this case the database maker has a *de facto* economic monopoly on all the information contained in his database. Since granting a monopoly on facts or information reduces social welfare, an intellectual property right in single pieces of information should not be granted. However, what about a collection of several pieces of information? There is a tension between market failure and welfare loss. It may in some cases be important to grant a right on a database for a short period and at tight conditions in order to induce production of information. Some protection seems necessary to induce the production of collections of information. The intellectual property right (legal monopoly or exclusive right) can be granted if there has been investment in making the database but it must be tightly regulated since it creates a *de facto* economic monopoly. Access to information must not be prevented; thus refusals to grant access, access at abusive conditions and abusive prices must be prohibited. With the results of this analysis in mind, we can examine if, and if so, under which conditions, database makers can protect their databases contents by contract over and above the legal protection granted by the database *sui generis* right.

2. Contractual protection of *sui generis* right-protected databases

Article 13 of the Directive provides that the holder of the *sui generis* right on a database may additionally protect its database by contract. But it does not give more detail than this.³¹ The question is whether the database maker can get more protection by contract than the protection granted by the *sui generis* right. In order to get more protection, he can restrict or eliminate the limits of the protection, i.e. restrict or eliminate the free extraction or re-utilisation of insubstantial parts, restrict or eliminate the principle of exhaustion, restrict or eliminate all or some of the exceptions and/or broaden the term. He can do so by standard form contract or by a fully negotiated contract.³²

When a contract is fully negotiated the two parties have equal bargaining power and contracting parties will only agree to restrictions on their rights if they receive an

³¹ Article 13 reads: "Continued application of other legal provisions: This Directive shall be without prejudice to provisions concerning in particular copyright, rights related to copyright or any other rights or obligations subsisting in the data, works or other materials incorporated into a database, patent rights, trade marks, design rights, the protection of national treasures, laws on restrictive practices and unfair competition, trade secrets, security, confidentiality, data protection and privacy, access to public documents, and the law of contract."

³² On these notions, see Guibault, p. 113 ff.

advantageous counterpart.³³ The case of adhesion contracts is different. First, they generally are drafted unilaterally by producers and destined to a weaker party, the consumer or end-user of a product. They are take-it-or-leave-it contracts in the sense that the consumer has no choice but to accept the conditions of the contract *en bloc* or else not adhere. In addition those contracts often also have clauses binding subsequent users of the product, i.e. not only the original acquirer. These contracts are therefore extremely close if not identical to rights against the world and can be said to constitute private legislation.³⁴ Intellectual products, be they protected or not by intellectual property rights, are now increasingly sold in this form. These contracts are commonly called shrink-wrap (for offline products) or click-wrap or click-through (for online products). Not only have those contracts become spread but they very often look very similar, thereby annihilating potential choice for the consumer.³⁵ Therefore they can be said to be as efficient as intellectual property rights and even more if they override intellectual property rights' limits. Therefore a distinction will have to be drawn between these two types of contract.

The question whether holders of the *sui generis* right can obtain more protection by contract is partially dealt with in article 15 of the Database Directive. Article 15 provides: "*Binding nature of certain provisions: Any contractual provision contrary to Article[s] (...) 8 shall be null and void.*" Article 15 thus renders article 8 imperative. This means that the database producer cannot override article 8 by contract, be it a fully negotiated contract or a standard form contract. In other words, the database maker cannot prevent a lawful user to extract or re-utilise insubstantial parts for any purpose whatsoever. Only when the lawful user extracts or re-utilises insubstantial parts which amount to a substantial part or the entire database does the database maker find his right back. In sum, article 15 thus makes it absolutely impossible for the maker of any type of database to prevent, at least lawful users, from extracting or re-utilising insubstantial parts of the database as long as the sum of insubstantial parts (if several are taken) does not amount to a substantial part. The question is whether this legal provision is economically efficient. This is addressed later in each of the following subsections for each type of database (multiple and sole source).

A contrario, article 15 means that the optional exceptions and the other limits (exhaustion and term) can be overridden by contract since neither article 15 nor any other article of the Directive does render them imperative. The question therefore is

³³ Guibault, p. 198 ff.

³⁴ M. Lemley, "Intellectual property and shrinkwrap licences" [1995] 68 Southern Cal. L.R. p. 1239; M. Lemley, "Shrinkwrap in cyberspace" [1995] 35 Jurimetrics Journal, p. 320; J. Ginsburg, "Copyright, Common Law, and Sui Generis Protection of Databases in The United States and Abroad" [1997] 66 U. Cin. L. Rev., p. 167; D. Karjala, "Federal Preemption of Shrinkwrap and On-Line Licenses" [1997] 22 U. Dayton L. Rev., p. 540; D. Nimmer, E. Brown & G. Frischling, "The metamorphosis of contract into expand" [1999] 87 Cal.L.R. 1, p. 60; G. Founds, "Shrinkwrap and clickwrap agreements: 2B or not 2B?" [2000] 52 Federal Communications Law Journal, p. 115; N. Elkin-Koren, "Copyright policy and the limits of freedom of contract" [1997] 12 Berk. Tech. L.J., p. 103-104 ("In fact, a contract may be formed whenever the potential licensee acts in a way defined as an acceptance by the offeror (the master of the offer). If that method of acceptance is defined by ProCD to be the use of the software, then any stranger who finds the CD-ROM in the street and uses it would become a party to the license agreement. In other words, if the standard of assent necessary to form contractual relationships is minimal, then no unlicensed access to works will be possible. The outcome will be very similar to the effect of a right *in rem*.")

³⁵ M. Lemley, "Shrinkwrap in cyberspace" [1995] 35 Jurimetrics Journal, p. 319.

whether this overprotects the database producer's investment in making the database. Since the economic situation is different for multiple and sole source databases, this question is addressed for each separately.

2.1. Multiple source databases

If the database is not a sole source, by definition the data is in the public domain and anyone can make a database out of it. The first database producer to make such database will face competition. Knowing he will face competition, he will not include terms in his contracts which unduly restrict access to data. Similarly, he will not charge a price above the cost of his investment and a reasonable return or profit which amounts to the same investment and profit that anyone needs to make to market the same base. If not, he will face entry and competition. For example if he provides that substantial parts of the database cannot be reused at all for ever, the user will not enter into the licence and enter a licence agreement with another database producer who does not prevent the use of insubstantial parts and e.g. only prevents the reuse of substantial parts of the database only for the 15 year term. If there is no competitor, he will seek the data in the public domain. Similarly, if the database maker does not allow the extraction of a substantial part of the database for private purposes, the user will look elsewhere. This is so whether the user is a professional or a private party. People are used to shop around. In case of analog databases, e.g. dictionaries, the range of similar databases will be found in the same place in a bookshop and it will be easy to compare prices and conditions. With online databases, it is also easy for a user to get the 'best deal'. Web sites are now entirely devoted to make price comparisons (and this could include comparison of terms of use) between products, thereby helping users to decide what is best for them.³⁶

In conclusion, if the database is not a sole source, competition exists at least potentially. This means that users can have access to other similar or identical databases. If not, i.e. there is only one database on the market, it can be assumed that the price and conditions of use are competitive since the database maker knows he will face competition if he makes his price and conditions worse for the user. Thus in this scenario, prices should be low and conditions of access reasonable. Contractual protection of multiple source *sui generis* right-protected databases does therefore not overprotect databases. This is so whatever the type of contract (fully negotiated or adhesion), since there is competition in the market. Article 15 of the Directive is economically efficient albeit unnecessary. A legal provision prohibiting the overriding of limits to the *sui generis* right is not necessary because the market is itself efficient (there is no market failure and no state intervention needed). A user is free to accept a contract which overrides some limits if he so wishes. Generally, in this case, he will request an advantage in exchange of this restriction (e.g. a lower price). However article 15 makes this impossible for insubstantial parts. This is unnecessary and overly restrictive of parties' contractual freedom.

A problem that may happen where there are several database producers of similar databases is collusion between the several producers to fix prices or conditions. For this, there is already a remedy available: article 81 of the European Community Treaty ("ECT"). This provision of competition law prohibits agreements and concerted practices between undertakings which may affect trade between Member

³⁶ See e.g. www.froogle.google.co.uk; www.pricescan.com; www.pricerunner.co.uk.

States and whose object or effect is to prevent or distort competition in the EU. This includes the fixing of prices or other trading conditions. These agreements and practices are automatically void (art. 81.2 ECT).

2.2. Sole source databases

When the database is a sole source, there is a legal and economic monopoly. The user has no choice, he cannot get the information elsewhere and is forced to deal with the single database producer; he must accept the price and conditions or else have no access to the information. In the case of monopoly on data, the situation is in a way similar and in another way dissimilar to copyright. It is similar because an economic monopoly exists. It is dissimilar because the object of the monopoly is different. Copyright's monopoly is on original expression, the *sui generis* right's is on information. If a work is protected by copyright, say a book on copyright law, since the monopoly is only on the original expression, anyone can create another book on copyright law using a different original expression. The monopoly is not as great as a monopoly on raw information like under the *sui generis* right. The user who finds a textbook on copyright too expensive will be able to buy another similar textbook for a lesser price, so since there is some substitutability between copyright works, there is some competition (monopolistic competition). This substitutability does not occur in the case of a sole source database protected by the *sui generis* right. So the solution in this case must be at least identical or even more radical than under copyright law.

As regards the limit of the non protection of insubstantial parts, the imperativity of this limit provided in article 15 is economically efficient and in this case both useful and necessary. It is so for fully negotiated and adhesion contracts: in both cases, the user has no choice because of the monopoly. Any user, be it a professional or a private party, has a weak bargaining power since by definition there is no competition in the market. Thus any contract, including contracts at arm's length, will be take-it-or-leave-it and potentially taking away the rights of the user provided in the *sui generis* right law.

As far as exceptions to the *sui generis* right are concerned, the analysis made by L. Guibault of the question of contractual overridability of exceptions to the exclusive rights of the copyright holder is useful. The analysis developed in her thesis shows that neither copyright itself nor any other external laws which can regulate it (civil law (abuse of rights), consumer protection law, competition law and constitutional law) provides an adequate means to control whether the copyright owner who overrides copyright limitations respects the copyright goals.³⁷ By definition, because the *sui generis* right is too recent to be envisaged in those laws, this conclusion can be drawn *a fortiori* for the *sui generis* right. L. Guibault explains that contracts which restrict copyright limitations upset the balance struck by every copyright regime between creators and users' rights. This applies similarly for the *sui generis* right. She makes a distinction between adhesion contracts and fully negotiated contracts which restrict copyright exceptions. As seen in the above paragraph, since in the case of a monopoly on information, there is no competition, this distinction is not valid. All contracts are take-it-or-leave-it. Thus only her analysis concerning adhesion contracts is valid.

³⁷ Guibault, p. 302-303.

L. Guibault proposes two solutions to the problem of restrictive adhesion contracts: one is to render imperative the most important limitations to copyright, i.e. those which preserve free competition and the user's freedom of expression.³⁸ Those exceptions are the right to make reproductions for the purposes of criticism or review, research and parody. Another solution would be to "extend the regulations concerning unfair consumer contracts terms to cover copyright matters."³⁹ In this second solution, a term of a standard form contract could be presumed unfair if it departs from the provisions of the copyright act. However this second solution seems less certain legally speaking. A provision making some limits imperative is clear-cut: in every case, the provision of the contract will be illegal. Legal certainty is increased and there is no need for litigation: since the defendant would be sure to lose he will not engage proceedings. If the other solution is followed, litigation may be necessary as it will always be down to the judge to decide if the term presumed unfair is indeed unfair in each case. This solution might be more adapted to copyright than to the *sui generis* right. In case of sole source databases protected by the *sui generis* right, we are dealing with monopolies on information and they give much more power than a monopoly on original expression. The first solution (imperativity of exceptions) seems therefore preferable.

Applying L. Guibault's second solution to sole source databases protected by the *sui generis* right entails that the exception for the purposes of research and teaching should be made imperative. Arguably the exception for private purposes should also be made imperative since the rationale underlying it is the respect of the human right to privacy. The third exception allowing extraction and reutilisation for the purposes of public security or an administrative or judicial procedure should also be made imperative since it protects superior interests of the state. This has been done in only one Member State, Belgium, and for all databases (the provision does not make a distinction between multiple and sole source databases). In addition, the Directive should be revised to include an exception for criticism or review and for news reporting to respect the human right of freedom of speech and since they are based on the preservation of this freedom, they should be made imperative in case of sole source databases. This imperativity means that the maker of a sole source database cannot refuse access to the substantial part of the contents of the database in those cases but it does not mean that in every case the data must be available for free. The desirability of asking a price is more justified economically when the use is reproductive rather than productive. Since economic analysis cannot so far provide a more precise answer to this question, this will be a matter of choice for the lawmaker.

The analysis above answers the question as regards the exceptions to the *sui generis* right in case a database producer is a monopolist. The analysis made in the literature is limited to exceptions to copyright rights.⁴⁰ There is no detailed examination so far as regards the other limits (i.e. exhaustion and term). It is submitted that the economic analysis of copyright law provides an answer to whether these other limits to copyright, which also exist in *sui generis* right law, can be overridden. This argument based on the economics of copyright can similarly be applied to the *sui generis* right.

³⁸ Guibault, p. 304. These are the only exceptions she considers should be made imperative.

³⁹ *Ibid.*

⁴⁰ Guibault; Vinje; Buydens & Dusollier.

As far as the term is concerned, the maker of a sole source *sui generis* right-protected database should not be able to extend the term of protection by contract. It would not be economically efficient to do so. This concerns both an extension limited in time (e.g. 50 years instead of 15 years) and an extension unlimited in time (perpetual protection)). Therefore the limit of the *sui generis* right term should be made imperative in case of sole source databases. The specific question of exhaustion is not touched upon by Landes & Posner. However it can be said that to restrict or eliminate transfers would block trade and would also be economically inefficient. Preventing the application of the exhaustion principle through contracts would mean a standstill of the economy. If persons were barred from transferring copies, the freedom of commerce would be deeply affected. It would mean the end of second hand bookshops, the prohibition on making gifts and more importantly in some cases even the end of commercial deals (just think of the market of sculptures and paintings). In any case, it seems that it is illegal to override this intellectual property principle. First, some national courts have held that it was illegal to override it. Twice the Dutch Supreme Court ruled that a restriction preventing the redistribution of a work in contradiction with the exhaustion principle was ineffective.⁴¹ German courts have also handed down similar decisions on the basis of a higher principle established in the Constitution.⁴² Second, it seems that restrictions concerning exhaustion of any intellectual property right would run afoul of the principle of the free movement of goods and services as established in articles 28 and 29 ECT. In conclusion, the producer of a sole source database should not be able to extend the term of *sui generis* protection nor eliminate or restrict the principle of exhaustion. Those limits need to be made imperative in the legislation. The Directive should be revised to this effect.

3. Contractual protection of databases not protected by *sui generis* right

The second question this paper attempts to answer is whether it is economically efficient, and therefore not overprotective, that a database maker be allowed to contractually protect a database not protected by the *sui generis* right, either because it was protected but is now fallen in the public domain or because it does not meet the requirements to be protected by the *sui generis* right. The same distinction between multiple source and sole source databases must be made.

3.1. Multiple source databases

If the database is multiple source and the database producer protects it by any type of contract, he will face competition since the data remains freely available. The

⁴¹ Hoge Raad, 25 January 1952, 1952 Nederlandse Jurisprudentie 95 (*De N.V. Drukkerij "de Spaarnestad" v. Leesinrichting 'Favoriet'* - the *Leesportefeuille* case); Hoge Raad, 20 November 1987, 1988 Nederlandse Jurisprudentie, 280 (*Stemar v Free Record Shop* - the CD cover had a notice which forbade purchasers to further transfer it to others). See Guibault, p. 222-223.

⁴² Landgericht Munich, 9 June 1983, 12 GRUR 1983, 763 (*Vermietung von Tontraegern*). This decision was confirmed by the Supreme Court and the Constitutional court and concerned a notice preventing persons to rent a sound recording. The court of first instance ruled that the copyright owner cannot prevent the renting of a work s/he put on the market. Right holders are under article 27(1) of the German Copyright Act entitled to receive remuneration for the rental. The Supreme Court opined that if a rights holder was able to prevent the further distribution of the works, it would impede the free circulation of goods in an unacceptable manner. The Explanatory Memorandum to the bill on the German Copyright Act of 1965 stated that the legislator did not intend to allow restrictions on the distribution right. The distribution right does not allow the rights holder to monitor the use of the work once lawfully put on the market.

situation will be exactly the same for databases which have fallen in the public domain and those which cannot be protected by *sui generis* right. Competition will drive prices down and conditions will be reasonable. Again there may be collusions between producers of similar databases to fix prices or conditions, but this is regulated by article 81 ECT. There will be no over-protection.

3.2. Sole source databases

If the database is sole source, was protected but is now fallen in the public domain, it is by definition available to anyone, so the situation is similar to the situation of a multiple source database above. But if it is a sole source database which cannot be protected by *sui generis* right, then the database producer is a monopolist.

Two situations can be identified. The first is when the database has required some investment but not enough to trigger the *sui generis* right. This situation will be rare since the level of investment is rather low.⁴³ However this situation can arise. The second situation is when the database has not required any investment. This is the case of most spin-off databases which are by-products of a principal activity. Famous such databases are football and horse racing fixtures like in the *Fixtures Marketing* and *British Horseracing Board* cases.⁴⁴ Other examples include television listings, event schedules, train and plane timetables etc. In those cases, a distinction must be made between fully negotiated and adhesion contracts. With a fully negotiated contract, the sole source database producer does not bind third parties, so he is not adequately protected. Anyone can reproduce the information except the contracting party. No fear of overprotection exists. If an adhesion contract is used however, this will amount to private legislation as strong as an intellectual property right. Therefore if it overrides the limits of the *sui generis* right, it will be overprotective.

It should be noted however that it seems contrary to the economics of information goods combined with the human rights approach to allow producers of databases which have not required any investment to get protection similar to intellectual property (through adhesion contracts). Because the database producer has not invested, he does not deserve protection as an incentive to create a database. His database is a mere by-product of an activity which he receives compensation for. For instance, a television company's aim is to organise programmes, i.e. decide which programme is shown at which time. The list of programmes is a result of this activity.

⁴³ For a discussion, see E. Derclaye, "Databases *sui generis* right: what is a substantial investment? A tentative definition" [2005] IIC 2-30.

⁴⁴ Cases C-46/02 (*Fixtures Marketing v. Veikkaus*), C-444/02 (*Fixtures Marketing v. OPAP*), C-338/02 (*Fixtures Marketing v. Svenska Spel*), C-203/02 (*The British Horseracing Board v. William Hill*) (European Court of Justice). The four decisions, all dating from 9 November 2004, are available on www.curia.eu.int. For comments, see T. Aplin, "The ECJ Elucidates the Database Right" [2005] IPQ, p. 204-221; M. Davison & P. B. Hugenholtz, "Football fixtures, horseraces and spin offs: the ECJ domesticates the database right" [2005] EIPR, p. 113-118; E. Derclaye, "The Court of Justice interprets the database *sui generis* right for the first time" [2005] ELR, p. 420-430. In those four similar cases, the European Court of Justice ruled that a substantial investment in creating data does not trigger the *sui generis* right. There must be a separate substantial investment in collecting, presenting or verifying the data. This leaves many spin-off databases unprotectable by the *sui generis* right. For an explanation of the spin-off theory, see P. B. Hugenholtz, "Program Schedules, Event Data and Telephone Subscriber Listings under the Database Directive - The 'Spin-Off' Doctrine in the Netherlands and elsewhere in Europe" [2003] Paper presented at 11th Annual Conference on International Intellectual Property Law & Policy, Fordham University School of Law, New York, 14-25 April 2003; E. Derclaye, "Databases *sui generis* right: should we adopt the spin-off theory?" [2004] EIPR, p. 402-412.

The television channel does receive financial compensation for showing programmes through e.g. television licences and advertising. Thus its investment is recouped. Allowing such database producers to get such protection for their data is rewarding them for an effort they have not made. It is overprotecting them and prevents the public from having access to this data. This is in line with economic analysis of information goods and the Directive whose aim is to promote and protect investment. If the sole source database has not requested an investment, it does not deserve protection be it by intellectual property or contractual protection amounting to it in effect.⁴⁵

Conclusion

In conclusion, there will be no problems of overprotection with databases protected or not protected by the *sui generis* right whose data is pre-existing since competition will exist (at least potentially) in the market. This is so because the data is available to anyone and anyone can make a database out of it. Thus the law does not have to specifically provide that limits to the *sui generis* right must be made imperative for multiple source databases. The market will regulate itself. Article 15 of the Directive should be revised to only apply to sole source *sui generis* right-protected databases.

As far as sole source databases are concerned, three situations must be distinguished. If the database has fallen in the public domain, no problem of overprotection may occur since there will be competition in the market. If the database is protected by the *sui generis* right, it should be made unlawful for any contract to override its limits.⁴⁶ Therefore, in this case, the Directive must be revised to render all limits imperative. If the database cannot be protected by the *sui generis* right either because the investment is not substantial or there is no investment, only adhesion contracts overriding the limits of the *sui generis* right are overprotective. The Directive should be revised to include a provision to avoid this.

⁴⁵ Of course, this leaves contractual protection by confidence intact.

⁴⁶ Including the additional exceptions of news reporting and criticism or review which the Directive should be revised to include. See above.