Database sui generis right: the need to take the public's right to information and freedom of expression into account

Estelle Derclaye
1. Database Sui Generis Right: The Need to Take the Public’s Right to Information and Freedom of Expression into Account

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In the European Union, databases are protected by a specific intellectual property right, the database *sui generis* right, also known as the ‘database right’. Many have criticised it for its excessive breadth. Section 1 of the chapter first briefly presents the database right’s main features. Thereafter, Section 2 examines whether the public’s right to information, which is protected by Article 10 of the *European Convention on Human Rights* (ECHR), must be taken into account into the database right legislation (the Database Directive). It concludes that it must and therefore determines how it must be taken into account. To do so, a standard will be used. Section 3 then scrutinises the database right to see whether the public’s right to information is sufficiently taken into account. As some features of the right are too broad and do not respect the public’s right to information, Section 4 suggests remedies using the standard established in Section 2.

1. MAIN FEATURES OF THE DATABASE RIGHT

The database right was introduced in 1996 by Directive 96/9/EC of the European Parliament and of the Council on the legal protection of databases (‘the Directive’).1 Even if the Directive is not explicit on the database right’s legal nature, it is an intellectual property right. It is implicit from Article 7(3) which states that the right may be transferred, assigned or granted under contractual licence and from Article 7(1), which states it is a right to prevent extraction and reutilisation of the contents of the database. In addition, the principle of exhaustion (Article 7(2)(b)) and exceptions to the rights (Articles

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The right protects databases. They can be in any form, for example, on paper, CD-ROM or online (Article 1(1)) and are defined as collections ‘of independent works, data or other materials, systematically or methodically arranged and individually accessible by electronic or other means’ (Article 1(2)). This definition is quite broad and it has been argued that supermarkets, rooms, stone collections, even carnival processions, could be databases. This is because of the term ‘materials’, which can arguably include tangible objects. Nevertheless, apart from this breadth due to the term ‘materials’, the definition is somewhat circumscribed, as the items must be independent from each other. This will, for example, exclude statistical tables whose numbers are dependent on one another, that is, no element has autonomous informative value. In addition, the elements must be arranged systematically or methodically. This will exclude haphazard collections.

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4 This interpretation has been confirmed by the European Court of Justice (‘ECJ’) in its four related decisions of 9 November 2004, *Fixtures Marketing Ltd v Organismos Prognostikon Agonon Podosfairou* (OPAP) (case C–444/02) [2005] 1 CMLR 16 (further referred to as ‘OPAP’); *Fixtures Marketing Ltd v Oy Veikkaus AB* (case C–46/02) [2005] ECDR 2 (further referred to as ‘Veikkaus’); *Fixtures Marketing Ltd v Svenska Spel AB* (case C–
The right accrues when a qualitatively or quantitatively substantial investment in the obtaining, verifying or presenting of the materials is proven (Article 7). What is an investment is not defined. However, from the Directive’s recitals and the ECJ’s (European Court of Justice) interpretation in its decisions of 2004, it is clear that investment can be financial, material (acquisition of equipment, for example, computers) or human (number of employees, hours of work). The Directive does not define a substantial investment and the ECJ did not venture in giving an interpretation. Many national courts, and the Advocate General in its Opinion in the Veikkaus case, have interpreted the requirement as being rather low. For example, a few days work or a few hundred pounds or euros may be sufficient to qualify the database. By contrast, the terms ‘qualitatively’ and ‘quantitatively’ have been interpreted by the ECJ. A quantitatively substantial investment refers to the amount of money and/or time invested in the database while a qualitatively substantial investment refers to the effort and/or energy invested in the database. The alternative requirement set out in the Directive (quantitatively or qualitatively) therefore allows protecting a database that required only a substantial investment in effort or energy rather than in money.

The ECJ construed the term ‘obtaining’ as meaning only collecting the elements of a database. This excludes their creation. This interpretation is very important because a lot of so-called spin-off databases, similar to those in question in the cases before the ECJ (that is, horseracing and football fixtures) are now excluded from protection. This includes, for example, event schedules, television or radio programmes, transport timetables, telephone subscriber data, stock prices, scientific data resulting from research or experimentation and sports results. If the substantial investment in the collection, verification or presentation of the materials is inseparable from the substantial investment in their creation, the right will not subsist. On the other hand, verifying and presenting have been given a straightforward dictionary meaning. Verifying means ensuring the reliability of the information contained in the database and monitoring the accuracy of the materials collected when the database was created and during its operation.

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7  See, for example, paragraph 24 (Svenska Spel).
8  Paragraph 27 (Svenska Spel).
Presenting refers to ‘the resources used for the purpose of giving the database its function of processing information, that is to say those used for the systematic or methodical arrangement of the materials contained in that database and the organisation of their individual accessibility’.

As briefly mentioned above, the database right grants to the database maker, the right to prevent the extraction and the reutilisation of a substantial part, evaluated quantitatively or qualitatively, of the contents of the protected database (Article 7). The rights of extraction and reutilisation can be compared to the rights of reproduction and communication to the public in copyright law, as they are very similar. A substantial part has not been defined but, according to the ECJ, it must represent a substantial investment. Thanks to the ECJ’s ruling, it is also clear that a part that does not fulfil the requirement of a substantial part is automatically an insubstantial part. Finally, the substantial part evaluated quantitatively refers to the volume of the data extracted or re-utilised from the database and it must be assessed in relation to the volume of the contents of the whole of the database, while the substantial part evaluated qualitatively refers to the scale of investment in the obtaining, verification or presentation of the contents, regardless of whether that subject (or part) represents a quantitatively substantial part of the contents. Users can therefore use insubstantial parts as long as they do not do it repeatedly and systematically so that the accumulation of insubstantial parts becomes a substantial part.

There are three exceptions to the rights but they are all optional so Member States did not have to implement them. According to Article 9 of the Directive, lawful users, that is, those who have acquired a lawful copy of the database, can (a) extract a substantial part of the contents of a non-electronic database for private purposes; (b) extract a substantial part of any database for the purposes of illustration for teaching or scientific research, as long as it is not for commercial purposes and the source is indicated; and (c) extract and/or reutilise a substantial part of any database for the purposes of

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9 Paragraph 27 (Svenska Spel).
10 Paragraph 73 (BHB).
11 Paragraph 70 (BHB).
12 Paragraph 71 (BHB).
13 Articles 7(5) and 8(1) as construed by the ECJ, see paragraph 86 (BHB).
public security or an administrative or judicial procedure. Thus the number of exceptions varies from Member State to Member State. In France, for example, there is no teaching and research exception, while in the United Kingdom there is no private extraction exception. And vice versa. In both those countries, however, Article 9(c) was implemented. Some countries implemented all three exceptions (for example, Belgium). The right of the user to use insubstantial parts not amounting to a substantial part has been made imperative but not the three optional exceptions. Therefore, database makers can override them by contract and by technological protection measures (TPMs) as long, however, as Article 6(4) of the Copyright Directive is respected.

Finally, databases are protected for 15 years from their completion or their publication (Article 10). Furthermore, each time the database maker reinvests substantially in the obtaining, verifying or presenting of the elements of her database and there is a substantial change, she gets a new term of 15 years. What is unclear however is whether she gets it on the whole new database which comprises the ‘old’ elements (that is, those whose term has expired) or only on the elements that have newly been included, verified or presented.

2. SHOULD THE PUBLIC’S RIGHT TO INFORMATION BE TAKEN INTO ACCOUNT BY THE DATABASE RIGHT AND IF SO HOW?

To ascertain whether the public’s right to information should be taken into account by the database right, it must be recalled that, as it is an intellectual property right, the intellectual property paradigm applies. The intellectual property paradigm can be summarised as follows. No intellectual property right is absolute. There is an initial balance made within intellectual property laws. This balance represents a trade-off between several interests, mainly those of the creators on the one hand and those of the public or the users on the other. All intellectual property rights have therefore a delimited subject-matter, protection requirements, rights, exceptions and a limited term. How the balance is made in practice is different for each right. Sometimes this balance can tilt too much in favour of the authors, producers or inventors to

16 Article 23 bis of the 1994 Copyright Act.
18 This will be explored in more detail later.
the detriment of society. Remedies must then be found either internally (for example, by way of introducing new exceptions or expanding the existing ones) or when it is not possible, as has been proposed by some, externally (for example, using human rights).

Since, apart from the Directive itself, there is no guidance as to whether the public’s right to information is a relevant area of law that must be considered when enacting or interpreting the database right, the latter must be compared to the most closely related intellectual property right, that is, copyright. This is because originally databases were protected by copyright as literary works in many countries; although in some only the structure was protected (for example, France, Belgium, Germany), while in others (United Kingdom, Ireland) it was the contents. The traditional justifications for copyright (naturalist and utilitarian), as well as the much more recent justification that copyright is a human right, do not determine the exact limits of copyright (for example, how long the term should be, what the protection requirements should be) and, in this regard, they are not helpful. They only state that there must be a balance but do not determine which one or how to make it. The only justification that does that to a certain extent is the economic analysis of copyright law. Under the economic justification of copyright, ideas should not be protected, as they create monopolies that in turn generate welfare loss. This means that the number of works is reduced and this is not in the general interest as it reduces social welfare. Therefore, only expressions should be protected. However if the law makes it impossible to borrow some of the protected expression of a work, the number of works will decrease and, again, this will not enhance general welfare. Thus some use of works should be allowed, such as book reviews and productive use. Productive use (as opposed to reproductive use) lowers the costs of expression and thus reduces the cost of creating new works.

19 C. Geiger, Droit d’auteur et droit du public à l’information, Approche de droit comparé, (Paris: Litec, 2004), 69–112, showed that in copyright law, the balance has now tilted too much in favour of the producers.
20 Geiger, ibid., uses human rights to balance copyright law.
22 This is explored in detail in the author’s doctoral thesis on the legal protection of databases (to be published), at 33–43.
24 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) added to, in the case of literary works,
thereby increasing the total number of works. Reproductive use reduces the demand for the protected work. If a parody, for instance, reduces the demand for the original work, then it should be deemed to be infringing and not fair use.25 Finally, a limited copyright term reduces both monopoly profits and tracing costs. The longer the term, the fewer the number of works in the public domain and the higher the costs of expression will be and, therefore, the fewer works produced.26 Again, social welfare is not enhanced.

However, the economic justification of copyright does not perfectly determine the exact limits of copyright as it does not allow certain reproductive uses that are necessary to respect freedom of expression and the public’s right to information (which, as a reminder, must be respected by signatories that are legally bound by the ECHR). This is why, even if the newer justification for copyright, the human rights justification, does not determine the exact limits of copyright, it nevertheless readjusts the economic justification as it puts copyright on the same level as other human rights. Indeed, in the ECHR, all human rights have the same rank.27 Combining human rights’ and economic justifications ensures that certain uses are allowed that, under the economic justification alone, are not (for example, some reproductive uses). It is therefore stressed that both justifications complement each other and neither one is better than the other. Each has its own merits.

Therefore it is submitted that an appropriate criterion to determine the right balance within the database right is the economic analysis of law combined with the human rights’ justification.28 Indeed, all intellectual property rights are human rights. Although they are not expressly catalogued in the ECHR, they are within the ambit of Article 1 of the First Additional Protocol of the Convention, which recognises the property right as a human right. Case law and commentators are unanimous in saying that this article does not only apply to tangible goods but also to intangible ones.29 The database right, like copyright, is therefore a human right (property right) and a ‘right of others’, mentioned in Article 10(2) of the ECHR, which can restrict the freedom of expression and public’s right to information. This also

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25 Ibid., at 360.
26 Ibid., at 362.
28 For a more detailed explanation, see the author’s thesis, 54 ff. The reason is that both copyright works and databases protected by the database right are information goods and the economics of information goods apply similarly to both.
29 Geiger, supra n. 19, at 169.
means two things. First, like copyright, since the database right is a human right, it has the same rank as the public’s right to information and the right to freedom of expression. One is not by nature stronger than the other. An equal balance should be found between the two. Second, consequently, this also means that the two must be balanced against each other using the proportionality test expressed in Article 10(2) of the ECHR: freedom of information can be restricted as long as it is provided by law; the law pursues a legitimate aim and is necessary in a democratic society to protect the rights of others. ‘Law’ means that it must be sufficiently accessible and stated with sufficient precision so that citizens can regulate their behaviour accordingly. ‘Legitimate motives’ covers the protection of rights of others, including intellectual property rights.30 The last condition creates a proportionality test. However this test does not clarify the extent of the restriction because the balance will always be appreciated in concreto, in light of the facts of the case.31 The solution may thus be different in each case. Thus, when there is a conflict between copyright and freedom of expression there will be a balance of interests, and the room for manoeuvre left to lawmakers and judges will be lesser or greater depending on the case. Besides, while the European Court of Human Rights (ECHR) has never ruled on the intersection between copyright and freedom of speech or the public’s right to information, nor on the intersection between the latter and the database right, the European Commission of Human Rights (ECommHR) held in France 2 v France32 that it is normally not for the organs of the Convention to arbitrate, under Article 10(2), the conflicts that can occur between the right to communicate information freely and copyright.33 Thus, unless the Court departs in the future from the Commission’s view, it seems that a concrete test will never be established by the highest judicial organs.

Even if there is no judicial test, commentators have proposed tests to arbitrate conflicts between copyright and free speech. Professor Macmillan suggested that in order to find a balance between copyright and free speech, the nature of the copyright material and the purpose for which it is taken

30 Geiger, supra n. 19, ibid., at 167–8.
32 Strowel and Tulkens, supra n. 21, 295.
34 However, in that case the Commission ruled that the granting of damages for filming copyright works integrally without permission was a necessary restriction in a democratic society to protect others’ rights. However, it did not use a specific test to come to that result but decided in view of the circumstances of the cases (on a case-by-case basis).
must be taken into account.\textsuperscript{35} Professor Torremans, on the other hand, stated that ‘the higher the level of creativity and the more important the input of the creator is, the stronger the Human Rights claim of copyright will be’.\textsuperscript{36} Easton proposed the criterion of the public importance of the work protected. When a work is of public importance, a compulsory licence may not even be enough because a price still needs to be paid.\textsuperscript{37} Easton thus advocates free use of the work. So far no guidance has been given in respect of the \textit{sui generis} right.\textsuperscript{38}

What does it mean then that the two justifications (economic and human rights) must be combined? It means that while some protection must be granted to databases in the form of an intellectual property right, the right must be curtailed so that it respects the economic analysis of law and the public’s right to information. This entails several consequences.

First, only databases created at a cost should be protected; databases that required no investment should remain unprotected (for example, databases made by the state). Information and ideas must not be monopolised because this reduces social welfare. But here, 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 with tight conditions in order to induce production of this information. In this respect, a distinction between sole source and multiple source databases must be drawn. If the data is only available through one database (sole source), legal protection can be granted if there has been investment in making the database but this monopoly must be tightly regulated. Access to the information must not be prevented by refusal to grant access or by abusive prices.\textsuperscript{39} If the database is made of data existing in the public domain (multiple source), no monopoly is by definition possible as anybody can create the same database independently. In this case granting protection does not create a monopoly on information. If there are several sources of the same information, there is competition and the price


\textsuperscript{36} Torremans supra n. 21, 19.


\textsuperscript{38} J. Phillips, ‘Databases, the Human Rights Act and EU law’, in J. Griffiths and U. Suthersanen, eds, \textit{Copyright and Free Speech, Comparative and International Analyses} (Oxford: Oxford University Press, 2005), at 402 (offers some initial thoughts but not a concrete test stating that ‘general surveys of the human rights–intellectual property interface do not include database right’).

\textsuperscript{39} The proposals of Professors Macmillan and Torremans, supra n. 35 and 21 (consideration of the nature of copyright material; the higher the creative input, the stronger the human rights claim of copyright should be) can also apply to databases. Databases only protected by the \textit{sui generis} right reflect no creative input, so the human rights claim of the database maker is weak.
will be reasonable. If one database maker refuses access the user can get access to another source.

Second, productive use of the data comprised in the database should be allowed while reproductive use should be forbidden, except those that protect freedom of speech and dissemination of information.

Third, database protection must be limited in time to avoid the negative effects of monopolies in static situations. 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 (the database contents).

Other consequences as to the limits of the right are extrapolated from Geiger’s analysis of the copyright/public’s right to information interface. The limits and exceptions of the database right that are justified by human rights are rights and not simply interests. Therefore, since they are rights, they are at the same level as the database owner’s extraction and reutilisation rights. Consequently, they should not be interpreted restrictively nor should they be overridable by contracts or TPMs. However, this must be nuanced in respect of the database right. The distinction between multiple and sole source databases is important here. It is only necessary to render the exceptions and limits imperative against contracts and TPMs when the protected databases are sole source. Indeed, when there are several similar databases there will be competition and it is unlikely that such means will be used to restrict access to databases.

At the close of this analysis, the answer to the question posed is now obvious: the public’s right to information should definitely be taken into account when analysing the database right. It is as important as the most precise justification to determine the scope of the database right, the economic analysis of information goods, and it is its necessary complement. The above developments constitute our test or standard when verifying whether the provisions of the Directive concerning the database right took the public’s right to information sufficiently into account.

3. IS THE PUBLIC’S RIGHT TO INFORMATION SUFFICIENTLY TAKEN INTO ACCOUNT BY THE DATABASE RIGHT?

After this overview and the positive answer to the question that the database right should take the public’s right to information into consideration, the database right can be scrutinised against the standard established above to determine whether it is balanced or not; in other words, whether the public’s

40 Geiger, supra n. 19, at 186–93, 198 ff.
right to information is sufficiently taken into account.

Normally, as with copyright, the lawmaker strikes the right balance from the outset by providing appropriate limits in the law. But sometimes these limits and/or their judicial interpretation do not take the public’s right to information sufficiently into account. Therefore the public’s right to information may be used to correct that imbalance.\footnote{Competition law is another means to correct such imbalance but this means is outside the scope of this chapter.}

First, nowhere does the Directive account for the intersection between the \textit{sui generis} right and the public’s right to information.\footnote{Phillips, supra n. 38, at 411.} As the recitals show, the policy behind the adoption of the Directive was purely economic.\footnote{Ibid.} Once the limits of the database right are explored, this absence of balance in some important aspects of the right is revealed. The two main imbalances are the scarcity and narrowness of the exceptions to the right and the possible perpetual term.\footnote{Some problems also occur with some elements of the definition of a database but will not be explored here. The reader is referred to the author’s thesis at 169–70.} This does not mean, as many a commentator has claimed, however, that the right creates a monopoly on information.\footnote{Mallet-Poujol, supra n. 2, 10; J. Reichman and P. Samuelson, ‘Intellectual Property Rights in Data?’ \textit{Vanderbilt Law Review} 50 (1997), at 94; Geiger, supra n. 19, at 269, 268, n. 312 and 273, n. 316, citing S. Dusollier, Y. Poullet and M. Buydens, ‘Copyright and Access to Information in the Digital Environment’, \textit{Copyright Bulletin} 34 (2000), 8.} In fact, in almost all cases it will not, and will remain a right on investment. As explained above, a monopoly will only arise when the maker of a sole source database obtains the right and this is only possible if she can prove that a substantial investment has been made in obtaining, verifying or presenting the contents of the database, which must be separate from their creation. This will be rare. In case it happens, however, remedies must be found to curb monopoly effects; these will be discussed in the next section.

Let us come back to the two main problems: exceptions and term. First, the exceptions to the rights are both too narrow and too scarce. Also, they are only optional so some Member States may just ignore them. Reproductive uses, which protect freedom of speech and dissemination of information, are not adequately taken into account: there are no exceptions for the purposes of criticism and review or citation, nor for the purposes of news reporting. The latter two exceptions, which exist in most copyright laws, are necessary to ensure that the public’s right to information is respected. Also, the database right does not provide compulsory or statutory licences in the case of sole source databases for uses not falling in the exceptions above (mainly commercial uses).

Second, the right is not limited in time. Article 10(3) concerning the
renewal of the term is unclear. Because of this lack of clarity, the database right may not take into account the economics of information goods nor the public’s right to information. This is because old elements of a database, for which the investment has been recouped, could be protected indefinitely as long as they are kept in the new database to which the new term applies. The ECJ may have implicitly removed this potentiality when interpreting the test of infringement. As there must be a link between the part taken and the investment, if a user takes old elements of a database by definition she does not infringe. Nonetheless a problem still remains: the Directive does not provide a mechanism for the user to distinguish between old and new elements and, thus, does not ensure she knows whether she does or does not infringe. Because of the lack of such mechanism, the database right does not respect the public’s right to information.

The answer to the question posed in this section is therefore that the public’s right to information is not sufficiently taken into consideration within some of the limits of the database right.

4. REMEDIES

To remedy these problems, the following solutions can be used. They apply the standard developed in Section 2 (combination of the economic analysis of copyright and the human rights approach) and are mainly internal, that is, a revision of the Directive is necessary. However, in cases before them, courts can use Article 10 of the ECHR to achieve the same results since the internal solutions are based on it.

4.1 Solutions to Remedy the Scarcity and Narrowness of Exceptions

First, the optional exceptions provided in the Directive should be mandatory, that is, all Member States should be obliged to implement them.

Second, Article 9(b) should apply not only to extraction for teaching and research but also to re-utilisation because communicating information contained in a database is necessary, if not indispensable, to teaching and research. In addition, the exception should not only apply to illustration for teaching and research. The word ‘illustration’ should therefore be deleted to allow the broadest application. With these changes, this exception takes into account the public’s right to information. A fair compensation could be imposed. This is a policy choice. Requiring compensation would still respect

46 Geiger, supra n. 19, 366–8, n. 428. This exception could be granted to unlawful users as long as producers get compensated by way of a compulsory or statutory licence.
the standard determined in Section 2 but would weigh more in favour of database producers.

Third, at least two additional exceptions should be enacted, one allowing extraction and re-utilisation of a substantial part of the contents of a database for the purposes of news reporting, the other for the purposes of criticism or review. Only with these two additional exceptions, would the right effectively guarantee the public’s right to information.47 Fourth, an exception similar to Article 5(3)(b) of the Copyright Directive, which allows uses for the benefit of people with a disability, could also be added. Alternatively, instead of enacting specific exceptions, a broad fair use exception similar to the American copyright fair use provision (section 107 of the Copyright Act) could be enacted.

In addition to those exceptions, which should be applicable to all databases, compulsory or statutory licences should be provided in the case of sole source databases for uses not falling in the exceptions above (mainly commercial uses).48 Such internal solution is better than leaving the solution of this problem to competition authorities because it is more certain legally as it is determined ex ante.49 Since sole source databases give their owners a monopoly on information, their bad effects (decrease in quantity and quality, and increase in price) should be avoided. For those databases, the current protection does not fully respect freedom of speech and the public’s right to information. To avoid that, the Directive should force the database maker to license her database to users in some cases to prevent refusals to grant access or excessive prices. The initial draft Directive included a compulsory licence provision for sole source databases only.50 Compulsory licensing in the case

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47 Geiger, supra n. 19, at 360–62 (discussing the citation and news reporting exceptions in copyright law).
48 See also E. Dommering, ‘An Introduction to Information Law, Works of Fact at the Crossroads of Freedom and Protection’, in E.J. Dommering and P.B. Hugenhotlz, eds, Protecting Works of Fact, Copyright Freedom of Expression and Information Law (Deventer/Boston: Kluwer Law and Taxation Publishers, 1991), 39 (suggests that to enable the free flow of information, databases of monopolists (for example, stock exchange quotations, telephone directories, television listings) must be subject to a compulsory licence); Geiger, supra n. 19, at 321–2, n. 372 (proposes compulsory licences for databases but does not make the distinction between sole source and multiple source databases). The difference between compulsory and statutory licences is explained below.
50 Article 8(1), COM (92) 24 final (‘Notwithstanding the right in Article 2(5) to prevent the unauthorised extraction and re-utilisation of the contents of a database, if the works or materials contained in a database which is made publicly available cannot be independently created, collected or obtained from any other source, the right to extract and reutilise, in whole or substantial parts, works or materials from that database for commercial purposes, shall be licensed on fair and non-discriminatory terms.’). The Commission dropped the provision because it encountered the opposition of local and national administrations. P.
of multiple source databases is unnecessary: since there is competition, access will be granted at reasonable prices and refusals to grant access will be rare.\footnote{Every database producer will want to recoup its investment by charging a price for access rather than letting its competitors do so. If she refuses to grant access, a competitor may or will do so and she will lose an opportunity to recoup her investment by licensing the use to the user.}

Two monopolistic situations must be distinguished for the purpose of providing these compulsory or statutory licences. The first is when there is a single monopolist, the second when there are several monopolists of complementary goods (tragedy of the anticommons\footnote{This economic concept means that a resource is prone to under-use when multiple owners each have a right to exclude others from a scarce resource and no-one has an effective privilege of use. This happens when two producers have a monopoly on two complementary goods. A basic example is the following: producer A makes left shoes and producer B makes right shoes. In this case, independent pricing leads to sub-optimal usage. If producer A decreases the price of her good, then the demand for product B increases, but this benefit is not appropriated by producer A. Hence, both producers have insufficient incentives to lower prices. The final price of the goods (sum of the two prices) is larger than the price that a single owner would set. In other words, A and B price their goods at two prices, which taken together is higher than if there was only one monopoly (that is, only one producer would produce the two complementary goods). This means that one monopoly is better than two. Under this tragedy of the anticommons, a merger of the two producers is better than having them producing the goods separately. On this tragedy, see, for example, Levêque and Ménière, supra n. 49, 17 ff; M. Heller, ‘The Tragedy of the Anticommons: Property in the Transition from Marx to Markets’, \textit{Harvard Law Review} 111 (1998), 621.}). In this second case, it may be required that all monopolists grant access to the database at a reasonable price to anyone so that anyone can make a comprehensive database (containing theirs). This remedy is adequate \textit{ex post}. \textit{Ex ante}, it is only adequate if the new database is not a complete substitute to theirs because in this case, their incentive to make the initial databases will be reduced. This will depend on each case. For instance, in the case of a proposed national telephone directory, users may want to access only a regional one, so the exhaustive national telephone directory will not substitute the regional one for users who are not interested in finding telephone numbers of persons located in other regions. Similarly, a criminal lawyer may not want to have access to the whole of Westlaw because she never practices, for example, family or administrative law. It may be argued that any user may want to have access to a comprehensive database at some stage. Therefore the new comprehensive database that improves by definition on the previous ones will always be a substitute. Thus the compulsory or statutory licence remedy must be used with care. Perhaps a solution would be to apply this remedy only after a few years have lapsed (for example, three years after the publication of the new database).
years). The same solution should apply a fortiori in the first case (single monopolist), because in that case, there is direct competition, that is, the new database automatically will replace the initial one. So in both cases, a compulsory or statutory licence should only apply when the proposed new database is better than the initial database and after a few years so that most of the investment made by the first compiler can be recouped in the most profitable way.

What is the difference between a compulsory and a statutory licence? Under a compulsory licence, whereas the user has no right to make use of the work without the prior authorisation of the right owner, the latter is obliged to contract with users who request a licence and the price is determined through negotiations (if they are not fruitful, the courts or an administrative authority steps in).53 Under a statutory licence, the user is free to use the work without authorisation provided she pays a price (generally predetermined by law).54 The choice between a compulsory licence and a statutory licence should be guided by the importance of the data to society. This is examined below.

Which databases create monopolies and should be subject to a compulsory or statutory licence? Four situations can be identified. The first can occur with some databases of collected information. Normally, where the information is collected, it is copied by the database producer and it remains in the public domain. However the sui generis right can lead to monopoly when the information collected is by definition removed from the public domain. An example is the situation of museums or galleries, which hold unique pieces. The monopoly arises because, once collected, those works do not ‘leave an exemplary in the public domain’. A distinction should be made between museums or galleries constituted of works fallen into the public domain and those constituted of works still in copyright. In the case of databases consisting of works in unique exemplary already fallen into the public domain, the Directive should provide for a statutory licence. Under this licence, visitors should, for example, be able to take pictures or film the works without permission. A price may have to be paid but extraction and re-utilisation should not be refused (for example, unless it would damage artwork). This licence should exist when the museum itself does not sell reproductions of the works at a reasonable price.

The second situation occurs with databases constituted of mass produced


subject-matter assigned to the database producer. The case of a gallery or museum composed of protected works falls into this situation. If a protected work is assigned to a database maker, it belongs in exclusivity to the database maker and it might be an infringement of the *sui generis* right to extract whole or part of this work. Normally the reproduction in full of a copyrighted work is also a copyright infringement so the fact that the work is included in a database does not change the matter. However the database right should not prevent a user from exercising the exceptions on the copyright work because it is included in the database. Thus, if copyright law allows the reproduction or communication of the whole or a substantial part of a work under one of its exceptions, the fact that the work is included in a database should not prevent the application of the copyright exceptions that are applicable to it. In other words, the database right should not be a means to circumvent the copyright exceptions. Article 7(4) could be redrafted more precisely to address this specific problem.

Third, a monopoly can also arise when there is a substantial investment in presenting created information. Two situations should be distinguished. First, if the created data can be presented in many different useful ways, since many types of useful presentations are possible, competition is possible as created data is not protectable. This situation is therefore not problematic and the *sui generis* right should be able to accrue to those making the substantial investment in presenting the created data in various ways. The second situation is when the presentation is the only one that is user-friendly, useful. Another presentation will not be commercially viable. The *sui generis* right, if granted, would protect the arrangement (otherwise unprotected by copyright because not original) and since it cannot be rearranged in another useful way, the underlying data as well. Thus since it is not commercially viable to rearrange the data in another way, there is a monopoly on the presentation and the underlying data. Since there has been a substantial investment, it would be unfair to allow the public to get the presented data for free. The public has an interest in having the data presented to it in the most user-friendly way and such efforts should be rewarded. If they were not, the data would not be presented at all and the public would therefore not be able to benefit from it. However since such data is not available elsewhere, the risk of abusing the monopoly automatically granted by the law is high. Thus the Directive should provide for a statutory or compulsory licence in order to avoid prohibitive prices and refusals to licence. The public should pay for the information (in other words, the database maker should be rewarded for its presentation efforts) but only a fair and reasonable price.

Fourth, a similar solution must exist for recorded data if it could only be recorded by one database maker because of prohibitive costs (for example,
meteoro logical, genomic data). In this case, the same abuses (refusals to grant access or excessive prices) are highly possible. When one is confronted with the presentation of naturally occurring elements that require considerable sums, not easily available, and the data is vital to society, the undertaking making the investment should on the one hand be rewarded for its endeavours through protection but, on the other, should not prevent mankind from benefiting from it. The Directive should therefore provide for a compulsory or statutory licence.

Which type of licence is best suited for each type of situation? In the case of created data, a statutory licence seems more appropriate because the database owners are absolute monopolists. On the other hand, it could be argued that the information is not so vital to society that such a radical solution should not be advocated and that the less drastic solution of a compulsory licence should be preferred. In the case of recorded data, a compulsory licence seems more appropriate than a statutory licence because the risk of monopoly is less high (natural monopolists rather than absolute monopolists). On the other hand, it could be argued that since the information is so vital to society a statutory licence should be preferred. In the case of museums and galleries holding unique copies/items of public domain works, a statutory licence seems preferable due to the importance of the works to society. In all cases, it is an important and difficult choice best left to the legislature. There is also the question of the time when the licences should apply. This could fluctuate in respect of the investment made. If the investment is very important, the licence could only be applicable after a certain period of time (for example, a few years). If the investment is not important, the licence could be immediately applicable.

To respect the public’s right to information, exceptions and licences should be subject to a final requirement. When a sole source database is involved, existing and proposed new exceptions based on the public’s right to information and proposed compulsory and statutory licences should be made imperative. As, in this case, database makers are monopolists, they can be tempted to use contracts and/or TPMs to restrict access to information. Since there are no other sources of the information, such restrictions are against the public’s right to information. Article 15 of the Directive attempts to remedy this problem but it only renders Article 8 imperative, not all exceptions. Also Article 15 applies indiscriminately to all databases whereas it should only apply to sole source databases. Article 15 should therefore be revised to render all exceptions justified by the public’s right to information imperative in case of sole source databases. This will solve the problem for

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55 Recorded data is available to anyone to record as it is found in nature. However, in many cases, expensive tools or enormous resources must be used so that in effect it creates a natural monopoly since few entities have the resources to record the information.
contracts and TPMs.

Article 6(4)(1) of the Copyright Directive, which also applies to the database right, attempts to remedy this problem as far as TPMs are concerned. However, it is not satisfactory. Commentators are anonymous to say it is obscure. There are two main problems with Article 6(4). First, under Article 6(4), the state can only intervene to allow users to benefit from exceptions on works whose access is blocked by TPMs if the rights owners do not do so within a reasonable amount of time. But the text does not state how long the rights owners have. Thus if they do not do anything, the state cannot intervene. Rights owners have no interest in intervening to reduce their rights. However, Article 6(4) can in fact give an incentive to rights owners to provide for access themselves rather than have such solution imposed by the state. Also it is rare that rights owners and users get to an agreement without being forced.

The second problem of Article 6(4) is that the rights owners or the state are obliged to intervene to guarantee the benefit of only some exceptions. For example, the private copying and citation exceptions are not in the list of Article 6(4) so the state is not obliged to guarantee its exercise to users. This means that rights owners can use TPMs to neutralise exceptions that are not in the list of Article 6(4). Such a possibility is unlawful: it violates human rights because such exceptions are founded on human rights. As human rights are hierarchically superior to the Directive, it could be said that Article 6(4) is in this respect invalid. Thus Article 6(4) should be revised to include those exceptions. In the meantime, users could invoke Article 10 of the ECHR before courts to benefit from these exceptions if neither the rights owners nor the state allows them to benefit from them because they have not provided mechanisms to circumvent the TPMs in these cases.

4.2 Solutions to Remedy the Potential Perpetual Term

It is contrary to the economics of intellectual property not to allow a new term of protection if there is a new substantial investment. Such a new term

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56 Article 6(4)(1) provides that ‘Notwithstanding the legal protection provided for in paragraph 1, in the absence of voluntary measures taken by rightholders, including agreements between rightholders and other parties concerned, Member States shall take appropriate measures to ensure that rightholders make available to the beneficiary of an exception or limitation provided for in national law in accordance with Article 5(2)(a), (2)(c), (2)(d), (2)(e), (3)(a), (3)(b) or (3)(e) the means of benefiting from that exception or limitation, to the extent necessary to benefit from that exception or limitation and where that beneficiary has legal access to the protected work or subject-matter concerned.’

57 See Article 6(4)(5) of the Copyright Directive.

58 Geiger, supra n. 19, at 378.

59 Ibid., at 378–79.

60 Ibid., at 381.
can be given while concomitantly avoiding perpetual protection of old elements. It is possible that the ECJ ruling implies that the entirety of a dynamic database and *a fortiori* substantial parts of it are not protected perpetually. This is because once the term of 15 years has passed, there is no more substantial investment and thus there is no infringement in extracting or re-utilising the database or a substantial part of it. But this will only be possible if the user knows what the old and new elements in a dynamic database are. This knowledge is impossible to acquire under the current state of the law so the Directive must be revised to enable users to make the difference between old and new data.

Two solutions can be identified in order to enable users to determine the date at which an element falls into the public domain.

One solution is to tag the data with the date of either completion or publication of the database. If all elements are so tagged, the user will automatically know which ones are in the public domain and which ones are still protected. If the database maker makes a new substantial investment in re-verifying or re-presenting the whole database, she will have to re-tag the elements with the new date of completion or publication and all elements will still be protected under the new term. However if only part of a database is re-verified or re-arranged and this constitutes a substantial investment through a substantial change, the elements could be tagged distinguishing between the re-verified/re-arranged data (still protected) and the non-re-verified/non-re-arranged data (not protected anymore). In this system for example, if the database maker only updates, verifies or re-arranges 10 per cent of the database, she gets renewed protection only for those 10 per cent and not for the entire database. The tagging solution respects the intellectual property rationale of limited duration (protecting the old elements does not give any incentive to the database maker), the principle that one should not be protected twice for the same effort, and the public’s right to information. The system is the same as the regime of derivative works in copyright law. A derivative work, which builds upon a work that is in the public domain, will only be protected in its new features. All that is in the public domain will remain free for all to use. It is not revived because someone makes a derivative work out of it.

The second solution is to force database makers to deposit their initial database in a central register at the date of completion or publication of their database. Once the term of 15 years expires, anyone could access the database through the register. *Meanwhile* the database producer could still update its database and market it. Each time she updates it, she would have to deposit the new database to the register. This register could be on-line and users could access ‘old’/public domain databases there.

Which solution is best? Providing access to ‘old’ databases by tagging is
easy for off-line databases, which include both CD-ROM and paper databases. As the database maker of an off-line database can issue versions every so often (for example, six months, a year), each version will be protected for 15 years and the data will be tagged with the date of completion or making available in each version. The old version will thus be in the public domain after 15 years. Even if the new version comprises the same data, the old version may still be available, perhaps not on the market but in libraries, in second-hand shops, or simply because the user had acquired it earlier. Thus the situation is clear and simple for the user. She knows she does not infringe because all the data is visible and tagged.

By contrast, with a constantly updated on-line database (a dynamic database), tagging is not an adequate solution. The old data is merged with the new data and is not directly visible to the user. The user will make a search and will get a number of hits, which will reveal the status of the data (old or new). However, she will have paid a fee for accessing the whole database comprising the old and new elements and will pay for extraction or re-utilisation of any element, old or new before knowing whether what she will extract is old or new. So she may end up paying for extraction and/or re-utilisation of old elements. Thus the old data will never be accessible for free unless the database owner is required by law to make available, after a regular period of time (for example, six months, a year), a printed version of its database or alternatively provides for free the ‘old’ elements on-line (for example, by marketing two products, one free with only the old elements the other for subscription containing only the new elements). Thus with dynamic databases, there is a danger of locking up public domain information since old versions will not be available but only the constantly updated and thus perpetually protected database. The solution would be to force the database maker to make available the old database for free after a period of time. The idea of the register seems thus preferable. In fact a combination of tagging and registration is ideal.

How should this work in practice? All the elements of the first version of a dynamic database should be tagged. The database should then be registered. Thereafter, the database producer should continue tagging each additional item and register her database each time a new element is added. As these databases will be in electronic format, this is not taxing. The registrar would then release the old data in the public domain at the expiry

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61 L. Bently and B. Sherman, *Intellectual Property Law* (Oxford: Oxford University Press, 2004, 2nd edn), 300, n. 72 (‘Accessing such database may be unproblematic where there is a hard copy, but much more difficult where the owner of database right has only distributed the database ‘online’ and has subjected it to regular updating.’).

of the 15 years (that is, make it available on the Internet or otherwise if not possible\textsuperscript{63}). It will be easy to do so as each item will be tagged. The release of the database in the public domain by the registrar is more certain than if left to the sole good will of database owners of dynamic databases. A small filing fee could be requested for the purpose of recouping the costs of maintaining the register. Thus the register would serve to establish the term of protection but also would preserve the public domain. As can be seen, a combination of tagging and registration is adequate for dynamic databases.

In conclusion, the Directive should be revised to provide clearly that old elements of a database are unprotected after the expiration of the initial 15 years term unless they have been re-verified or re-arranged. In addition, the Directive should provide that database owners must tag each element of their databases and register their databases in a central registry. The Directive should also provide that the registrar, at the end of the 15 years’ term, should release the old data in the public domain, ideally on the Internet.

5. CONCLUSION

This chapter has shown that it is necessary to take the public’s right to information into consideration when applying the database right. This is because both these rights are human rights and are on the same level. Ideally, the public’s right to information should be taken into account within the database right itself, which, as has been shown, has not been the case in all of its aspects. When it is not and until the Directive is revised, Article 10 of the ECHR can be invoked before jurisdictions to correct the imbalance. This has already been attempted in the framework of copyright law (to construe the citation exception flexibly), unsuccessfully in France,\textsuperscript{64} but successfully in Germany.\textsuperscript{65}

Thus while we are waiting for the Directive to be revised,\textsuperscript{66} courts could use Article 10 of the ECHR to construe the existing exceptions broadly and even add to them (for example, citation and news reporting exceptions) as


\textsuperscript{65} For a discussion, see Geiger, supra n. 19, 402 ff.

\textsuperscript{66} A report has been handed down by the Commission on 12 December 2005 recommending certain options (for example, revising or abolishing the sui generis right) and requesting comments before taking action. See http://europa.eu.int/comm/internal_market/copyright/docs/databases/evaluation_report_en.pdf.
well as force database producers to make the old elements accessible to users, for example, on the Internet. They could also allow users of sole source database producers, on the basis of article 10 of the ECHR or of competition law, to circumvent TPMs in the cases provided for in Article 6(4) of the Copyright Directive as well as in the cases of other exceptions not provided there but justified by the public’s right to information. Finally, still on the basis of Article 10 of the ECHR, courts could allow users to breach their contracts with sole source database producers that override exceptions based on the public’s right to information.