

# The database dilemma: looking for the best deal between investors and society

*Review of recent trends and suggested amendments of Dir. 9/1996/EC*

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## Abstract

The analysis of the protection of databases offers an interesting opportunity to see, from a general policy perspective, the tension between the polar alternatives to promote investments in innovation and creativity, reachable in the various legislations on IPRs matters: the temptation of **protectionism** (granting strong exclusive property rights, even beyond the traditional dichotomy patent/copyright, with huge scopes and few exceptions and limitations, aimed to protect investments *per se*, irrespective to their outcomes) and the confidence in **free competition** (avoiding, as far as feasible, the exclusive rights, or, at least, counterbalancing them with proper measures in favour of society and public domain, and leaving to the market and its proper and fair functioning the task to reward the creator).

The huge amount of papers on databases protection testifies the strong attraction that this topic plays to scholars from all over the world. Actually, the debate was particularly intense in the first two decades (1990-2006), until the European Commission released the outcomes of a survey on the Dir. 9/1996/EC (“EU Directive”) in which substantially admitted its failure in stimulate the information industry, through the *sui generis* exclusive right introduced.

Why then talking about databases again? One reason could be that the points arisen in the debate remain outstanding. Furthermore, it is a matter of fact that, notwithstanding the negative outcome of the European Commission survey, *sui generis* regimes for non-original databases not only remained in force in Europe, but has been adopted also in Mexico and in Russia, while in other Countries (as India) scholars’ proposal for the adoption of *sui generis* regime are made. Recent important political events and emerging nationalist pushes could open the door to new conceptions of IP and information sector, maybe looking for the protection of the “national” information and knowledge industry. Finally, the emerging of the “data-driven economy”, based on the exploitation of the “big data” generated by the Internet-of-People and the Internet-of-Things, poses increasingly new questions on the role of database protection and its economic impact. Therefore, a renewed discussion about the protection of non-original compilations would not be surprising.

In this context, the EU has the opportunity to learn from its experience and offer to the other jurisdictions the balance between the pros and the cons of a proprietary option, as a way to improve the internal market. Indeed, the EU Commission survey in itself (which is expected to be renewed in the 2017), some rulings rendered by the European Court of Justice and the proposals contained in the “Copyright Pack” issued by the EU Commission on 14 September 2016 seem to go towards a more open approach. We will see that, probably, it is not enough to have an effective pro-competitive system, even maintaining an exclusive rights structure. The “deal” between database makers and society needs to be reconsidered restoring the advantages for the latter party: the goals to be pursued are fostering the growth of the information and knowledge industries, removing and impeding the barriers to entry and the preservation of the public domain.

## The structure of the Paper

In the **Part I** the Dir. 9/1996/EC will be analysed, then compared with other different models in order to point out the different policy options in relation to the impact on the market. Then, it will be possible, in the **Part II**, analysing the (slow and still uncertain) shifting of the European model towards a more open system, leaving to the **Conclusions** the summary of the outstanding concerns to be considered.

## Part I: the Directive 9/1996/EC on non-original databases – analysis and comparison with other models of protection.

### I.1 - The notion of database

Since its beginning in the early '90s, the debate on the protection and the legal nature of databases has been one of the most unsolved in the IP related matters. After three decades, national regulations are still very fragmented resulting in a high degree of dis-harmonization. Unlikely many other sectors of IPRs, such fragmentation involves developed Countries, which usually have homogeneous positions in the international debates. In this scenario, the crucial point seems to be that any options did not prove to be the best suitable, since all of these present critical *cons* often prevailing on the *pros* introduced.

“Database” is a very vague concept, repeatedly used during the years by Firms, Scholars and Legislators; but, actually, one of the first problem concerning databases protection remains... *defining* databases.

The definitions provided by the Legislators are broad and uncertain, leaving to the Courts the hard task to (try to) close the gap between the legal notion and what exists in reality.

Limiting our analysis to the European legislation, art. 1(2) of Dir. 9/1996/EC (“EU Directive) defines database as “*a collection of independent works, data or other materials arranged in a systematic or methodical way and individually accessible by electronic or other means*”.

The main elements of such a definition could be summarized as follows. A database is:

- a **(physical or digital) collection** or compilation of elements,
- **whatever and however they are** (data, information, works, copyrighted or not),
- **selected, arranged and presented** in a **systematic or methodical** way
- without depriving the single elements of their **informative meaning**.

In this perspective, books, websites *per se*, multimedia presentations, lectures, are not “databases”, as each element contained finds its meaning in relation to the whole; in a database, instead, any element should be stand-alone, i.e. it could be extracted from the whole and keep (at least) a minimum of sense *per se*.

### Database as a “knowledge” product

It is pretty clear that, with a broad definition as such, anything and nothing could be “database” at the same time. Traditionally, such a vague notion allowed information industries to claim legal protection for immaterial assets developed through their typical activities: i.e. creating, storing, arranging and presenting information. Nowadays, with the emerging of the “data-drive economy”, based on the “big data” generated by the Internet-of-People (the information relating to the online behaviours of the internet users) and by the Internet-of-Things (the information captured by the Machine-to-Machine networks), such a vague notion risks to enter in collision with the “new” principles of “free movement of data” and “access to data”<sup>1</sup>.

Back in the beginning of the debate, a solution was searched originally in the protection of the copyrighted works, finding the link in the “**knowledge**” category, pretending that both databases and copyrighted works were expression of “knowledge”.

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<sup>1</sup> [Communication](#) of 10 January 2017 by the EU Commission on the “Building European Data Economy” initiative.

In this perspective, it was argued<sup>2</sup> that also databases, as expressions of knowledge, would suffer the same **market failures of the public goods** from a Law&Economics point of view:

- i) **non-rivalness**, i.e. the use of knowledge does not imply its natural consumption;
- ii) **non-excludability**, i.e. it is impossible or economically unreasonable impeding someone to use it.

Therefore, in a “natural” situation, investments in knowledge-products would be unreasonable because the creator would not recoup the investments he made. **The intervention of the government** would be then needed to remedy to the above market failures; typically, such intervention consists in the grant of exclusive property rights, through which the creator would obtain the artificial excludability which allows him, during the limited time of monopoly, to try to recoup the costs of his investments.

### The problem of (non-)originality

The big missing in the assimilation of database to the copyright field rested “originality”, the eligible subject-matter requirement for copyright; and it was precisely at this point that the divisions among the jurisdictions started. Indeed, while a global consensus was found on considering the *original* databases as copyrightable subject-matters<sup>3</sup>, the European Union introduced an exclusive property right also for the *non-original* databases (Chapter III of the Dir. 9/1996/EC, the “EU Directive”).

More precisely, **original databases** are the ones presenting an arbitrary degree of choice in the selection, arrangement and/or presentation of the data, i.e. in the *structure* of the database, which triggers the “ordinary” copyright protection.

Nevertheless, the originality standard revealed very soon the diversity of the *rationale* of copyright *vis-à-vis* the core aspect of databases, that is primarily information as such rather than creativity; therefore, the collections of data which aim to be exhaustive and complete and found in this completeness their most relevant commercial value rest outside the scope of the copyright protection, due to the lack of any degree of choice in the selection of data that grounds the originality standard for databases (the **completeness paradox**<sup>4</sup>); the same outcome happens to the compilations organized according to **ordinary and non-creative criteria** (alphabetical, chronological).

Consequently, a common perception that the core part of the industrial sector in question was missing with the originality standard started to spread among the stakeholders, and some scholars and

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<sup>2</sup> W.J. GORDON, *Asymmetric market failure and /prisoner’s dilemma in intellectual property*, in COPYRIGHT SYMPOSIUM (PART II), *Copyright Protection For Computer Databases, Cd-Roms and Factual Compilations*, 17 U. Dayton L. Rev. 323 1991-1992, pp. 853-881; Y.M. BRAUNSTEIN, *Economic impact of database protection in developing countries and countries in transition*, and T. RIIS, *Economic impact of the protection of unoriginal databases in developing Countries and Countries in transition*, both papers part of the STUDIES PREPARED FOR WIPO STANDING COMMITTEE ON COPYRIGHTS AND RELATED RIGHTS (2002); H. ZHU, S.E. MADNICK, M.D. SIEGEL, *An Economic Analysis of policies for the protection and reuse of noncopyrightable database contents*, Journal of Management Information Systems (2008); E. DERCLAYE, *The legal protection of databases – A comparative analysis*, (2008).

<sup>3</sup> See Art. 10(2) of the TRIPs Agreement (1994) and Art. 5 of the WIPO Copyright Treaty (1996).

<sup>4</sup> Indeed, a very complete and exhaustive collection of data has, *per se*, no “selection” of its content (therefore, no “creativity”). A clear example are the telephone directories, as in Feist, the cornerstone US Supreme Court considered below, which the more complete they are the more they have commercial value but, at the same time, the less they could trigger copyright protection missing an arbitrary choice in the selection of their content: “*under Feist, such databases may not qualify for copyright protection because their very completeness undermines any claim that there is "original" selection in them*”, R.A. KREISS, *Introduction*, pp. 8-9, in COPYRIGHT SYMPOSIUM (PART I), *Copyright Protection For Computer Databases, Cd-Roms and Factual Compilations*, 17 U. Dayton L. Rev. 323 1991-1992.

practitioners, facing this situation of **under-protection**, invoked the adoption of opportune legislative measures.

Notwithstanding the perception of under-protection was common, the debate on the measures and their nature to be taken by the Legislators presented divergent positions<sup>5</sup>; while the common tendency was not to adopt any specific legislation, such as in US, leaving to **unfair competition** the task to determine the cases of abuse, in other Countries, notably in the EU, a *sui generis* regime, based on the grant of a new strong **exclusive right**, was adopted. Furthermore, some scholars proposed a completely alternative model to the two chosen by the Legislators, **the compensatory liability rule**, which, avoiding to recur to new exclusive rights, offers a set of different rules to remedy the situation of under-protection.

In the following paragraph **I.2**, the EU Directive, as main expression of the exclusive property rights approach, will be analysed. Later in the paragraph **I.3**, a brief comparison with the two other different models above mentioned will be offered, paying particular attention to the policy options under each models, in relation to their impact on the market. For our purposes, “**market**” will be considered as the whole sum of the interests of the different stakeholders (investor/first-comer; second-comers, whether direct or just potential competitors or non-competitors at all; special users; public domain). Both the analysis and the comparison will be made through a check-list of key elements that will be pointed out for each models (nature of regulation; requirements; scope vis-à-vis the other stakeholders; duration; enforcement; public domain and legal status of data)<sup>6</sup>.

## I.2- The protection of non-original databases provided by Dir. 9/1996/EC

A *sui generis* exclusive property right regime has been introduced also in Mexico<sup>7</sup> and more recently in Russia<sup>8</sup>; in India some scholars formulated proposals for analogue regulation<sup>9</sup>. However, the Paper will focus only in the European legislation, analysing the EU Directive, as the first regulation which aims to approach the database topic systematically. Moreover, it is exactly in the European jurisdiction that interesting rethinkings on the scope of the *sui generis* regime seem to appear, the evaluation of which will be rendered in the following Part. II.

### *Nature of regulation*

The proprietary approach through a *sui generis* exclusive right is the strongest approach to address the perception of underprotection for databases. Due to the alleged ineffectiveness of the unfair competition approach, several stakeholders formulated requests for specific legal tools to protect the **content** of the database, and not only its structure. The protection by exclusive rights is generally additional to the residual tool of protection of unfair competition which rests as secondary ground of claim in case of free-riding.

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<sup>5</sup> The Basic Proposal of 30.08.1996 for the substantive provisions in respect of databases, establishing a new form of right, was discussed at WIPO, but did not reach the necessary consensus among the Countries and was never adopted.

<sup>6</sup> Some caveats regarding the scope of the comparison: the impact of technological protection measures (TPMs) and contracts and the discussion about other related issues (the pre-emption for the US and the analysis of the national implementations in the EU; the intersection with antitrust laws) will be excluded. Indeed, the goal that the comparison of this paper aims to pursue is to assess the better balance between the different interests in the market, rather than review the status and the effectiveness of the regulations on database in the different Countries.

<sup>7</sup> Art. 108 of Mexican Federal Law of Copyright, entered in force in 1996.

<sup>8</sup> Art. 1260(2) of the Russian Federation Civil Code, entered in force in 2011. See also, KALYATIN, *Problems of database protection in the Russian Federation*, Information & Communications Technology Law, 2012.

<sup>9</sup> GUPTA, *Protection of Databases in India: Copyright Termination sui generis Conception*, Journal of Intellectual Property Rights, Vol. 12, July 2007, pp. 422-427.

As far as the EU Directive is concerned, the **exclusive property right** is contained in the art. 7, according to which the database maker, i.e. who made the necessary investments (not necessarily the author or the inventor), has the **right to prevent anyone to extract or reuse**, without his permission, **the whole or a substantial part** of the database. The substantial part should be evaluate considering qualitatively and quantitatively the investments made for the part in question.

### *Requirements*

The main requirement triggering the *sui generis* protection is simply the investment. More precisely, art. 7 of EU Directive prescribes:

i) *a qualitatively and/or quantitatively substantial investment*,

Therefore, the investment is considered substantial according either the amount of financial investments (quantitative requirement) or the nature and the particular skills of the research employed (qualitative requirement). These broad requirements lead to a very broad subject-matter, designed more to include rather than exclude.

ii) *in either the obtaining, verification or presentation of the contents of the database*.

The activities considered by the EU Directive are again very inclusive, being sufficient a substantial investment in just one of the above listed phases of a database creation. Consequently, databases which would require relevant efforts in only the verification, and ordinary efforts in the other activities, will still meet the requirement for being subject-matter of the *sui generis* protection.

It is important to note that no requirement concerning the outcome of the investment (unlikely in the other field of the IPRs) is prescribed. The substantial investment is simply protected, irrespective to the its outcomes, i.e. whether it is original, creative, new or inventive.

Nor is required a sort of disclosure, registration or, at least, making available to the public: a database is protected just once the substantial investment is made and the database is completed. Therefore, as showed by several decisions<sup>10</sup>, also database purely internal and secret, such as clients lists, business models etc., could be protected. It is a resounding exception, from a theoretical point of view, of the classical “deal” inventor-creator/society according to which the State grants a monopoly against the disclosure of the invention (patent) or the creation and, therefore, presence into the public of more creative works (copyright).

### *Scope vis-à-vis the other stakeholders*

The restricted acts which the rightholder can prevent are either the unauthorized *i*) extraction or *ii*) reutilization of the database. Both the notions of the restricted acts are very broad in art. 7(2) of EU Dir.:

- as for *i*), the **extraction** is defined as “the permanent or temporary transfer of all or a substantial part of the contents of a database to another medium by any means or in any form”;
- as for *ii*), the **reutilization** is “any form of making available to the public all or a substantial part of the contents of a database by the distribution of copies, by renting, by on-line or other forms of transmission”.

It follows that the extraction and reutilization of an **insubstantial part** of the database is **not restricted to anyone**. Nevertheless, art. 7(5) requires, in case of **repeatedly and systematically** extraction and/or reutilization of insubstantial parts, a further evaluation of “fairness” inspired by the

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<sup>10</sup> Limiting to Italian Jurisdiction, see Tribunale di Genova, order of 13.05.2014; Tribunale di Milano, decision of 21.05.2014; Tribunale di Milano, order of 29.06.15; Tribunale di Milano, order of 19.02.2016; see also my article, in Italian, A. ANDOLINA, *La tutela autoriale e sui generis delle banche dati*, Lex24-Guida al Diritto, (2016).



classic “three-steps-test” of exceptions and limitations in IP: the extractions and/or reutilizations “which conflict with a normal exploitation of that database or which unreasonably prejudice the legitimate interests of the maker of the database” could be prevented by the latter.

Art. 8 introduces the notion of the **lawful user**, that is crucial to assess the scope of the *sui generis* right of the EU Directive.

At art. 8(1) it is stated that the maker of a database “*may not prevent a lawful user of the database from extracting and/or re-utilizing insubstantial parts of its contents, evaluated qualitatively and/or quantitatively, for any purposes whatsoever*”. Nevertheless, the art. 8(2) applies to the lawful users the three-steps-test, apparently in any cases (i.e., also in case of extraction and re-use of an insubstantial part): “*lawful user... may not perform acts which conflict with normal exploitation of the database or unreasonably prejudice the legitimate interests of the maker of the database*”.

This rule, strictly interpreted, would give to the rightholder more room to control and intervene in case of uses perceived as abuses: according to the literal formulation of art. 8(2) any kind of uses, in quality (consultation, re-adaptation, publication ecc) and in quantity (also an isolated use and not a number of “repeatedly and systematically” uses), may be subject to the evaluation of the three-steps-test. Paradoxically, the right *vis-à-vis* the lawful users could be wider than *vis-à-vis* the “unlawful” users: for the latter, the extraction and the re-use of an insubstantial part of the database is automatically out of the scope of *sui generis* right of the database maker; for the lawful users, instead, any acts, according art. 8(2), is subject to the three-step-test judgment.

Another key point in this respect is that the **few and facultative** (to the Member States) exceptions are applicable **only to the lawful users**. Indeed, art. 9 leaves to the Member States to prescribe that “lawful users... may, without the authorization of the database maker, extract or re-utilize a substantial part of its content”:

- a) for private purposes and only for non-electronic databases;
- b) for purposes of illustrating for teaching and scientific research;
- c) for public security or administrative or judicial procedures.

Therefore, the above exceptions (if any) should apply only to lawful users: nobody can invoke, for example, a scientific research exception unless being, in advance, a lawful user, irrespective to the possible qualification as scientist or researcher.

Finally, as for other considerations on the nature and the purposes of the use, such as derivative uses (also not in competition with the first comer), the EU Directive is silent, confirming a broad and firm monopoly: neither specific exceptions (perhaps accompanied with an equitable compensation) nor statutory licenses are provided.

#### *Duration*

The term of duration of the *sui generis* right is quite long (**15 years**, starting from the completion of the database or the making available to the public, if successive: art. 10 of the EU Dir.), closer to the duration of patents than other legal hybrid copyright-alike (e.g., Industrial Designs).

A **renewal** mechanism of equivalent term is introduced by art. 10(3) in case the rightholder proves new investments. It follows that the *sui generis* right on a database could be potentially perpetual.

### Enforcement

The European *sui generis* regime plays its primary function *ex ante*, introducing a defined subject-matter and giving a clear set of rules: all the stakeholders could operate in a framework with a relative high level of legal certainty.

Furthermore, as far as enforcement is concerned, it should be mentioned the Recital 56 of the EU Dir. which introduces a **reciprocity clause**, a resounding exception to the national treatment in force for the majority of the IP regulations: foreigners could invoke in Europe the *sui generis* right only if their Country provides for analogue protection. The reciprocity clause clearly emphasizes the protectionist intent of the EU Directive.

### Public domain and legal status of data

The *sui generis* right does not imply an express **ownership** of the data contained on the database. Nevertheless, such regime gives to the maker a right on the content of his product, creating an hybrid form of ownership: the maker has not the ownership of the single data, but on the stock of data (the whole content or its substantial part).

Such hybrid form of ownership clashes with the copyright “dogma”, according to which data and information must belong to the public domain. Practically, the ownership of the information contained on the database has a particularly dangerous effect in the so called **sole-source database**, i.e. the compilation of data and information contained only in one single database.

Furthermore, the weak set of few and facultative exceptions and limitations, applicable only to the lawful users and not to anyone, the long term of duration and its potential perpetuity, the lack of any other instruments of counterbalance such as statutory licences constitute clear **threats to the public domain**. The overall system designs a regulation which makes stronger the barrier to access to information, avoiding its free-flowing, essential, at least in a minimal part, for the progress of science and development.

### Conclusions

The exclusive property rights approach founds a specific subject-matter and offers a clear set of rules: the legal certainty is certainly one of the most important **pros** to be ascribed to this model and can contribute to respond to the perception of under-protection for databases. Nevertheless, as many experts pointed out, the European version of this model has led to the opposite situation of **over-protection**, consisting in:

- i) an unclear legal hybrid from a theoretical point of view (a quasi-IP monopoly, without neither innovation nor creativity required<sup>11</sup>, extended also to merely internal databases);
- ii) a threat to dissemination of knowledge, to science<sup>12</sup> and public domain (potential perpetuity, weak set of few and facultative exceptions);

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<sup>11</sup> “[The EU *sui generis*] gives the strongest intellectual property protection other than a patent for subject matter (information) without the value-added originality or novelty of copyright or a patent, though there has been investment in its collation”, C. COLSTON, *When information is boxed who should hold the key?*, Information & Communications Technology Law, (2002).

<sup>12</sup> J.A. BOVENBERG, *Blood, sweat and grants: ‘Honest Jim’ and the European database-right*, Genomics, Society and Policy, Vol.1 No.2 (2005).



- iii) an ineffective measure to stimulate new investments (see *infra* the EU Commission survey) and promote competition in the information industry (the lack of statutory licences leads to inefficiencies, in case of unreasonable refusal to grant licence<sup>13</sup>).

However, it should be noted that all these **cons** do not imply a negative judgment on an exclusive property rights approach *per se*. It has been argued that, in certain cases, a property rights approach could be the more pro-competitive one, leaving to the market and to the free transactions between the stakeholders to set prices and rules<sup>14</sup>. Furthermore, such approach avoids or, at least, reduces at the lowest degree the intervention of the State in fields sometimes very technical, with processes and products hardly to be estimated and regulated *a priori*.

The problem is that, in order to allow the system to work properly in a competitive manner, it is essential introducing the proper counterbalances to the strong position of the rightholders. Many times the IP regulations has been explained and justified as a deal between the inventor/creator and the society: to the contrary, the EU Directive,, seems to be focused in rewarding the database maker just for having invested some money or time in creating it, granting him one of the broadest legal monopoly, without asking basically nothing, but its creation, in return for the society.

Therefore, the point is not to revoke the deal, but amend it assuring the proper “piece of cake” for the public interests.

### I.3- Other models of protection of non-original databases

As already said, the property rights approach is not the only one adopted by the jurisdiction. Except to UK, in the common law area non-original databases are protected by general principles of unfair competition, which is, in a certain way, the most minimalist approach. On the other side, an alternative model has been proposed by Prof. Reichmann, inspired by his compensatory liability rule. A brief comparison of these two further models will be useful to assess the policy options which legislators must have in mind to chose the best regulation for database protection.

#### A- The unfair competition approach

##### *Nature of regulation*

Avoiding the introduction of new rights, the common law approach leaves to the **unfair competition** to set the cases of abuse by second-comers by free-riding the non-original database of the creator/first-comer.

To an unfair competition theory, **the misappropriation doctrine**, the US Supreme Court referred in *Feist Publications, Inc. v. Rural Telephone Co.*, 499 US 340 (1991), a cornerstone decision in US copyright law. In the case, Feist Publications, a firm specialized in telephone directory for multiple States of US, was sued by Rural Telephone who alleged that Feist had copied its telephone listings for the northwest Kansas, including it in its own directory notwithstanding the express denial of licence by Rural. The plaintiff claimed a copyright infringement on its telephone directory, arguing that such directory as a database triggered copyright protection based on the “sweat of the brow” doctrine (according to which the investment of a significant amount of time, labour and energy is sufficient to have copyright protection).

The Supreme Court dismissed the case, refusing the “sweat of the brow” doctrine as a proper test to determine the copyrightable subject-matter and requiring a minimum degree of creativity, “*no matter*

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<sup>13</sup> “The database may be re-created by a competitor—if the raw data can be found elsewhere—but without economic efficiency. This deters the production of secondary products, and may even encourage abuses of market power”, C. COLSTON, *When information ...*, cit.

<sup>14</sup> E. DERCLAYE, *The legal protection of databases – A comparative analysis*, (2008).

how crude, humble or obvious” it might be. Furthermore, the Supreme Court made an express reference to the misappropriation doctrine elaborated in *International News Service (INS) v. Associated Press (AP)*, 248 U.S. 215 (1918) as an alternative tool for giving protection to non-original compilations as the Rural’s one.

Traditionally, the misappropriation doctrine is used in the field of trademarks and distinctive signs, as ground of unfair competition claims in case of unauthorized use of signs in a detrimental way to the right-holder, resulting in an appropriation of his investments, reputation and goodwill<sup>15</sup>. Nevertheless, in *INS v. AP* the Supreme Court used the misappropriation doctrine in order to prohibit INS, a publisher, from selling, in competition with AP, hot news that INS copied from AP, going beyond the traditional perimeter of the distinctive sign.

Actually, the misappropriation doctrine had not an easy life during the years: very often the claims based on misappropriation were blocked by a pre-emption exception<sup>16</sup>. Even after the express mention made in *Feist*, very few were the disputes in which the misappropriation was used as ground of claim, and almost never in cases dealing with non-original compilations. Indeed, the tendency after *Feist* was to lower as far as possible the threshold of originality to trigger copyright protection<sup>17</sup>, leaving to the case resting outside the scope other extra-judicial protection tools (such as TPMs and contracts).

#### Requirements

The main elements of this particular application of the misappropriation doctrine are:

- i) the **substantial investments** made by the first-comer to develop a good with a commercial value;
- ii) the **appropriation**, without neither authorization nor compensation, by a second-comer;
- iii) the **harmful effect** for the first-comer of this appropriation, due to the competing relationship among the twos.

Several scholars were critical with the capability of the misappropriation doctrine to be effective in relation to non-original databases, even not considering the risk of pre-emption; others reviewed the criteria to be used by the Courts<sup>18</sup> or proposed the statutory adoption of a renewed misappropriation rule<sup>19</sup>.

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<sup>15</sup> “The misappropriation doctrine, as articulated in the *International News Service* case, is a doctrine relevant only to customer confusion. Misappropriation as the *International News Service* Court applied it, stems from the common law tort of trademark deception or of passing off”, L.J. RASKIND, *Assessing the impact of Feist*, pp. 331-349 in COPYRIGHT SYMPOSIUM (PART I), *Copyright Protection For Computer Databases, Cd-Roms and Factual Compilations*, 17 U. Dayton L. Rev. 323 1991-1992.

<sup>16</sup> V.S. EKSTRAND, *Drawing swords after Feist: efforts to legislate the database pirate*, *Communication Law and Policy*, (2002). The pre-emption exception derives from the Supremacy Clause of the Constitution according to which the “Constitution and the laws of the United States...shall be the supreme law of the land...anything in the constitutions or laws of any State to the contrary notwithstanding” (art. IV, clause 2). Practically, no other sources of law different by the federal law could regulate a subject-matter that is in the competence of the federal law; consequently, even if a subject-matter (as databases) is not regulated by the Congress but falls in its competence, e.g., affecting a field exhaustively occupied by a federal law or violating an existing federal law (in the case, the copyright federal regulation), any other sources of law (such as the misappropriation doctrine) would be considered “pre-empted” and therefore invalidated.

<sup>17</sup> V.S. EKSTRAND, *Drawing swords after Feist: efforts to legislate the database pirate*, *Communication Law and Policy*, (2002).

<sup>18</sup> W.J. GORDON, *On Owning Information: Intellectual Property and the Restitutory Impulse*, 78 Va. L. Rev. 149, 165 (1992).

<sup>19</sup> J.H. REICHMAN, P. SAMUELSON, *Intellectual Property in data?*, 50 Vand. L. Rev. 51 (1997), pp. 51-166.

Generally speaking, the misappropriation doctrine has been always considered as an unclear hybrid, born in the field of distinctive signs and aimed to protect consumers from misrepresentation and deception; its extension to any form of investment which produced a valuable good has been judged fragile and leading legal uncertainty<sup>20</sup>. Furthermore, the subject-matter is undefined, however not clearly fitting to database compilation.

#### *Scope vis-à-vis the other stakeholders*

The misappropriation doctrine does not offer clear elements to determine the scope of the protection. The first aspect of uncertainty is directly linked to the uncertainty of the subject-matter: it is not clear what is protected and, consequently, at what extent, if the entire result of the investment or also a limited part, and in the case what is the amount freely usable by second-comers. The point is that, as a matter of fact, unfair competition, likely in many other cases of its application, is a residual tool of protection, used to cover borderline situations.

Furthermore, there are no indications regarding the potential derivative use of the content of the database according the misappropriation doctrine. Indeed, a second-comer could use the whole or a part of a prior database as ground for a completely new product in arrangement and presentation, serving a different need, not pursued by the first-comer; or for a product having a bigger amount of data, in number and in category, in combination of which the content of the first database could have a different meaning and, also, commercial value.

The sole elements furnished by the misappropriation doctrine are constituted by *i*) the competing requirement, and *ii*) the harmful effect of the conduct of misappropriation.

As for *i*), it is straightforward that a **direct competitor** cannot use the content of a prior database, without authorization or license. The problem rests in the interpretation of the competitive relationship. Adopting a broad interpretation of competitive relationship (e.g., including also potential competitors or players in market for different goods and services or in different geographical location), the scope of protection would be huge, impeding to any firm, also playing in different markets, both in products and in territory, to use the content of their product. It follows a scope of protection very close to the exclusive rights, but without the set of exception and limitation to counterbalance it. To the contrary, adopting a narrower interpretation of “competitor” (limiting to competitor in the same geographical market for the same goods and services), which seems to be preferable, the prohibited conducts will be reduced to the exact copy ended to the same product or service, leaving rooms to **derivative use** by second-comers, only in direct competition with the first-comer.

As for *ii*), the correct interpretation of the harmful effect could open the door to all the special uses made by **second-comers not competitor or only potential competitor** (private use, scientific research, teaching purposes...), closing the gap left by the inapplicability of the fair use and/or the three-step-test for exceptions and limitations, due to the non-copyrighted nature of the regulation.

A further interpretation of the harmful effect requirement could offer more room for derivative use when it could be argued that the any harmful effect could be suffered in case of use of the content of

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<sup>20</sup> *The misappropriation doctrine (...) is a doctrine linked to the relational interest of seller and customer. The thrust of the doctrine is to bar customer confusion by the second seller*”, L.J. RASKIND, *Assessing the impact of Feist*, pp. 331-349 in COPYRIGHT SYMPOSIUM (PART I), *Copyright Protection For Computer Databases, Cd-Roms and Factual Compilations*, 17 U. Dayton L. Rev. 323 1991-1992.

the prior database in a manner, sector or application unpredicted and unpredictable, for any reason, by the first-comer.

#### *Duration*

The duration of the protection offered by unfair competition is undefined and, therefore, **potentially perpetual**. In reality, the effective duration of the protection depends on the actual persistency of the requirements; therefore, the protection lasts until the investments are made (*rectius*, considerable as a contribution to the society that deserves protection), and an actual harmful effect could be suffered by the maker of the prior database.

#### *Enforcement*

As a unfair competition theory, the misappropriation doctrine has inevitably an *ex-post* nature, i.e. its existence, scope and effectiveness could be appreciated only once determined by the Court. That is one of the most important shortcoming of this kind of approach, since it is unable to give legal certainty to the stakeholders, both who wants to know how far is his product protected and who wants how long he could use the content of the prior database without committing tort.

Moreover, going back to the US Jurisdiction, the uncertainty about the legal grounds for claiming a misappropriation tort and the few in number and in limited in scope precedent do not help to remedy to the perception of under-protection for the non-original databases creators.

The uncertainty is also reflected in the allocation of the burden of proof: it is up to the claimant to demonstrate, firstly, the subject-matter and, then, the alleged infringement through free-riding. It will be certainly easier for the defendant not only denying any violation but also the existence in itself of a valuable property to be misappropriated.

#### *Public domain and legal status of data*

The misappropriation doctrine is silent regarding the legal status of the data contained in the compilation; any clear inputs on the sort of the public domain is neither given.

Starting from a copyright perspective, we could assume that no right could be claimed on information *per se*. At the same time, the misappropriation doctrine gives generally protection to a product resulting from an investment; therefore, if the investments are focused in the collection, arrangement and presentation of a set of data in a unitary directory, the content of such directory (a database!) will become a sort of “property” of its creator who could sue any second-comers copying it without his permission. So, a restrictive effect in the public domain would be inevitable.

Actually, the sort of the public domain in the minimalist approach is one more time linked to the interpretation given to the requirements for invoking such a claim: the broader they are interpreted, the larger will be the restrictive effect to the public domain.

#### *Conclusions*

A “minimalist” approach is certainly the one with the lowest impact in the market: for who are not persuaded that the database creators really need some sort of protection such a low impact will be a good news; others will argue that the unfair competition approach based on the misappropriation doctrine does not seem to be the best suitable to respond to the situation of under-protection for the non-original databases. As a matter of facts, from an empirical point of view the misappropriation doctrine does not prove to be neither attractive for the stakeholders who rarely invoke it as principal claim (leaving it as residual claim) nor effective due to the few number of precedents in which the misappropriation doctrine was successfully applied to a non-original database.

Furthermore, a part of the issue about its effectiveness from a constitutional point of view in US, the main and original function of the misappropriation doctrine is to give a ground for claim in extreme cases of mis-representation and deception of the consumers, focusing on the relationships among competitors and/or among firms and consumers. As a case-by-case approach, the unfair competition consists in a tool for the Courts to restore equity in a particular factual case rather than give legal certainty for general and abstract subject-matters: it seems useless as such to set a certain framework of rules for an entire category of good, such database. Furthermore, this approach would rest silent in key issue for the database industry, leaving grey zones or dangerous gaps in the overall regulation: nothing could be cleared through unfair competition regarding the derivative uses, the legal status of the content of a database, the duration, the effect on public domain and the extension of the licit uses by special users, such as researchers or teachers. Finally, also the lack of clear precedents, increasing the perception of unpredictability, gives further reasons to discourage the adoption of this kind of approach.

## **B- The alternative approach**

### *Nature of regulation*

The contrast between *sui generis* and misappropriation hides the real alternative to the whole system: not protecting at all databases, neither original nor non-original, as copyrightable or quasi-copyrightable subject-matter for the simple reason that... they are not copyrightable subject-matters!

We already saw that “database” is a vague concept, used to sum-up the fluid and undefined activities of generating, storing, arranging and presenting information. Focusing the attention on the undefined nature of such activities, the notion of databases fits more in other legal categories with boundaries more relaxed and blurred than copyright, such as know-how.

In this perspective, it is useful recalling Prof. Reichman’s theory on the legal hybrids. He criticizes the legislative tendency to tailor special exclusive property rights to specific products, which misses the requirements of the classical IP “diarchy” (copyright for original expressions and patent for innovation) but suffers of a similar situation of under-protection and market failures (the list is long: industrial design, semiconductor, plant varieties, software, databases and so on). Prof. Reichman finds the reason of such under-protection in the easiness to be copied of such products, as they *bear know-how on their faces*: once launched in the market, the product could be quickly reproduced by any second-comers, with zero or almost zero R&D costs, depriving the first-comer of any natural lead time to enter in the market and gain a market position. In this way, the “failure” is not in the IP “diarchy” but in the secrecy law, which traditionally covered the undefined and multiple R&D investments in the industrial know-how. Therefore, Prof. Reichman’s proposal focuses on a new secrecy law (“**the compensatory liability rule**”), a modern regulation which has a restored notion of know-how (“the applied know-how”) as subject-matter.

The compensatory liability rule would consist in a set of default rules “*governing relations between originators and borrowers or users of unpatented, nondisclosed information that applies when the parties themselves have not entered any contractual agreement*”, aiming to let “*second comers... share directly or indirectly in the [first comer’s] costs of research and development*”<sup>21</sup>.

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<sup>21</sup> J.H. REICHMAN, *Legal hybrids between the patent and copyright paradigms*, 94 Colum. L. Rev. 2501 (1994), pp. 2432-2558.



### Requirements

The “**applied know-how**” is a pretty wide subject-matter, aiming to include potentially all the non-inventive innovation and non-creative novelties (legal hybrids: databases, IDs, plant varieties...), i.e. the *bearing-know-how-on-their-faces* products.

Therefore, such subject-matter would have negative requirements: all processes or products neither patentable nor copyrighable could be “applied know-how”.

As far as formal requirements are concerned, a sort of disclosure should be introduced, assigned to an administrative body the task to keep the register of the products seeking protection.

### Scope vis-à-vis the other stakeholders

The compensatory liability rule would be structured in two parts:

1) an initial period of **artificial lead time**, consisting in a legal monopoly as in the exclusive property rights: during this period the first comer would have the chance to enter in the market and recoup the investments fixing the best commercial price;

2) a second period in which the database could be used by second-comers against the proper fees to the investor, listed in a sort of **menu of uses** (*pick&pay*): such uses would be allowed through statutory licenses, predetermined according the characteristics and purposes of the use requested (e.g., the fee will be higher in case of direct competition and became lower the more far to the competition the use goes, as in case of derivative products) and assuring the fair uses for teaching and scientific research.

### Duration

The artificial lead time would be shorter than the *sui generis* right: Prof. Reichman proposed, firstly<sup>22</sup>, a period from 2 to 4 years and, in a specific proposal for database<sup>23</sup>, **5 years**. The artificial lead time would run from the disclosure or the publication in the register and not from the completion of the database.

The following period of *pick&pay* could last the remaining **10 years**. The lack of any renewal mechanism would avoid the risk of perpetual monopoly of the content of database.

### Enforcement

The compensatory liability rule would work with an *ex ante* functioning, as the *sui generis* regime, assuring the legal certainty of the predetermined set of rules. Furthermore, and unlikely the *sui generis* regime, the compensatory liability rule would regulate *ex ante* also the uses allowed by the second-comers, aiming to nullify the transaction costs and reduce to the minimum the dispute ones.

### Public domain and legal status of data

The impact on the public domain would be certainly beneficial. Indeed, the disclosure requirement will increase the dissemination of knowledge and the number of information available to the public. A clear set of exceptions will promote special uses such as teaching and scientific researches. The predetermined duration, non-renewable, of the two period would guarantee a higher number of information in public domain.

As for the legal status of data, no ownership on the content could be claimed, a part of the initial period of artificial lead time, however modicum.

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<sup>22</sup> J.H. REICHMAN, *Legal hybrids...*, cit..

<sup>23</sup> J.H. REICHMAN, P. SAMUELSON, *Intellectual Property in data?*, 50 Vand. L. Rev. 51 (1997), pp. 51-166.



## Conclusions

The introduction of a compensatory liability rule instead of the several *sui generis* regimes is probably unobtainable: it would require a very huge cultural and legislative revolution, with the abolishing of several laws and the need of rethinking to old categories and solutions. Nevertheless, Prof. Reichman's approach has the merit to design a system that aims to respond to the needs of the industries, without stressing the traditional IPRs, neither in extensive interpretations of the existing notions nor in the creation of new tailor-made legal hybrids. Furthermore, the lack of several exclusive property rights would have a beneficial impact in the dissemination of knowledge and contribute to a more pro-competitive and dynamic system. Due to its capacity to remediate to the under-protection situation and at the same time accomplish the goal of an open and competitive system, the compensatory liability rule is considered in this paper as a sort of "golden utopia", in comparison to which the other approaches will be analysed. Indeed, the goals, which would have been obtained through the compensatory liability rule, should be considered as the target for reaching the above mentioned "good deal" between investors and society; they are:

- **equity**: costs of R&D of first comer are shared with second-comers, through either fees, in both the first and second period, or reverse engineering which gives, to the first-comer, more lead time and, to the society, other investments in R&D;
- **pro-competitive effect**: marginal improvements, derivative and transformative uses and products are allowed, without depriving at all the first-comer of the fair compensation;
- **free-flow-information** for scientific research and teaching with equitable compensation;
- **no legal barrier** and **no private ownership** of information, data and public domain.

## TABLES

### A- The EU sui generis regime.

<b>Nature of regulation</b>	Exclusive property right
<b>Requirements</b>	
- <b>Substantive requirement</b>	Substantial investments (qualitative/quantitative) in obtaining, verification and presentation of data.
- <b>Formal requirement (disclosure or registration)</b>	No formal requirements (disclosure or registration)
<b>Scope vis-à-vis the other stakeholders</b>	Exceptions and limitations are facultative
• <b>Users</b>	Extraction and reutilization of insubstantial parts, unless repeatedly and systematically (three-steps-test).
• <b>Competitors</b>	Any use without right-holder's consent
• <b>Researchers</b>	Facultative exception, if lawful user.
• <b>Special users</b>	Facultative exception, if lawful user.
<b>Duration and renewal</b>	15 years renewable if new substantial investment
<b>Enforcement (ex ante / ex post)</b>	<i>Ex ante</i>
<b>Public domain and legal status of data</b>	<i>De facto</i> ownership of data contained in database. Strong ownership on data as stock and potential perpetuity.

### B- The misappropriation doctrine

<b>Nature of regulation</b>	Unfair competition
<b>Requirements</b>	
- <b>Substantive requirement</b>	<ul style="list-style-type: none"> <li>- Investments for a valuable product by A</li> <li>- Free-riding by competitor B</li> <li>- Harmful effect to A/consumers</li> </ul>
- <b>Formal requirement (disclosure or registration)</b>	No formal requirements (disclosure or registration)
<b>Scope vis-à-vis the other stakeholders</b>	
• <b>Users</b>	Contract
• <b>Competitors</b>	<ul style="list-style-type: none"> <li>• Any use without first-comer's consent;</li> <li>• Derivative uses?</li> </ul>
• <b>Researchers</b>	Outside the scope if not competitors
• <b>Special users</b>	Outside the scope if not competitors
<b>Duration and renewal</b>	Potentially unlimited
<b>Enforcement (ex ante / ex post)</b>	<i>Ex post</i>
<b>Public domain and legal status of data</b>	Uncertain: it depends on the interpretation of the requirements

### C- The compensatory liability rule.

<b>Nature of regulation</b>	"New" secrecy law (first part property right, then liability rule)
<b>Requirements</b>	
- <b>Substantive requirement</b>	Negative requirements: neither patentable nor copyrightable
- <b>Formal requirement (disclosure or registration)</b>	Registration and disclosure
<b>Scope vis-à-vis the other stakeholders</b>	Menu of second-comers' uses against fees
• <b>Users</b>	First period, no use.
• <b>Competitors</b>	After the artificial lead time, statutory licenses depending on: <ul style="list-style-type: none"> <li>• Quantum of appropriation;</li> <li>• Degree of similarity;</li> <li>• Degree of competition (products market);</li> <li>• Same or different geographical market.</li> </ul>
• <b>Researchers</b>	
• <b>Special users</b>	
<b>Duration and renewal</b>	<ol style="list-style-type: none"> <li>1. Artificial lead time: 5 years, not renewable</li> <li>2. Pick&amp;pay: 10 years</li> </ol>
<b>Enforcement (ex ante / ex post)</b>	<i>Ex ante.</i>
<b>Public domain and legal status of data</b>	<i>De facto</i> ownership of data contained in database, but weak ownership: limited in time; no ownership in derived data by second-users. Free flow of data mechanism.

## Part II: recent trends in the EU

The comparison between the different models of protection showed that none of them is exempted from criticisms. Generally speaking, while unfair competition seems to be ineffective and uncertain regarding its practical application on databases, the exclusive property right approach tended to be over-protective, unless well mitigated with the proper counterbalances, and focused more on the protection of the existing investments rather than on the stimulation of a competitive market. At the same time the alternative model of compensatory liability rule rests, at the moment, just a theoretical suggestion, not being adopted by any Country. Nevertheless, the compensatory liability rule could play an important role in inspiring the goals that a regulation on databases should reach, assuring a proper mechanism of cost-recovering for the investors and, on the other hand, avoiding the blocking effects on the market.

In the following paragraphs recent events regarding the EU Directive will be analysed, constituting a sort of trend, which seems to go towards a more open system in both the interpretation of the existing rules and in the adoption of necessary amendments. Probably it is not enough for talking of an effective shifting from a protectionist approach to a fully competitive one, but the small movements that will be considered here below could demonstrate a widespread awareness that the “deal” of the EU *sui generis* right between investors and society must be changed, as said before.

After 10 years from its implementation, the EU Commission conducted a **survey** to verify the impact of the Dir. 9/1996 and a second survey is going to be launched in 2017. The first survey, which is divided in two parts, the **Stakeholders Consultation**<sup>24</sup> and the **Evaluation Report**<sup>25</sup>, concluded that the EU *sui generis* regime did not stimulate particularly outcomes in the information industry, even if produced beneficial effect in term of legal certainty of the status and the rules concerning the databases (and that is the reason why it was eventually decided to keep the directive in force).

In the same years, the ECJ issued the **first rulings** regarding the EU Directive and contributed to clarify some of the shadow corners of the legislation. Some of these rulings have been of crucial importance in defining the property-right structure of the EU *sui generis* regime. Nevertheless, the interventions of the ECJ did not show always a coherent approach: while sometimes the anti-competitive effects were limited in the attempt to avoid undesirable monopolies on information, in other rulings the notion and the scope of the rights has been expanded in a way that makes impossible any derivative or transformative use.

Finally, in the “Copyright Pack” the EU Commission has recently issued, among others, two proposals of a directives, parts of which are dedicated to the introduction of mandatory exceptions to the *sui generis* right for scientific research (text and data-mining); digital and cross-border teaching activities; preservation of cultural heritage; and in favour of blind and visual impaired persons.

In the following part the impact of these recent events will be considered in relation to the same elements pointed out in the previous analysis of the different models.

### II.1 - Nature of regulation

The first judicial interpretations of the *sui generis* right confirmed the widest notions of the two rights reserved to the database maker. In **The British Horseracing v. William Hill**<sup>26</sup>, a dispute concerning the unauthorized use of the list of the horseracing by a betting company, the ECJ stated that the terms

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<sup>24</sup> [Stakeholders consultation](#), DG Internal Market and Services, 12 December 2005.

<sup>25</sup> [Evaluation report](#), DG Internal Market and Services, 12 December 2005.

<sup>26</sup> ECJ, *The British Horseracing v. William Hill*, C-203/02, 9 November 2004.

“extraction” and “re-utilisation” “*must be interpreted as referring to any unauthorised act of appropriation and distribution to the public of the whole or a part of the contents of a database*”. Furthermore, the ECJ excluded any relevance of the public and free accessibility of the database in order to interpret the rights reserved; therefore, “*the fact that the contents of a database were made accessible to the public by its maker or with his consent does not affect the right of the maker to prevent acts of extraction and/or re-utilisation*”.

Such broad interpretation of the rights reserved to the database makers increased the criticisms on the European *sui generis* regime. In the **Stakeholders Consultation**, made in 2005 in occasion of the EU Commission survey on the Dir. 9/1996/EC, the majority of the interviewees, even considering the legislation satisfactorily protective of the investments in the database creations, admitted that the EU Directive did not achieve “*a satisfactory balance between the rights and interests of the rightholders and users*”. Furthermore, about the 40% of the interviewees considered the definition of database “*too broad*”<sup>27</sup>.

The remarks about the nature and the overall impact of the European *sui generis* regime became even more serious when it was admitted that one of the first goal of the EU Directive, the stimulation of new investments in the database industry, was not achieved or, at least, provable, from an empirical perspective, leaving doubts about its effectiveness and usefulness<sup>28</sup>.

In conclusion, while the exclusive property right structure has never been in discussion in itself, being considered opportune in responding the need of protection of the relevant industry, its entire impact on the market has raised several concerns, cause to the lack of proper counterbalances to the database makers’ right, and doubts on its effectiveness in stimulating the growth of information sector.

## II.2 - Requirements

The ECJ in the first rulings on the EU Directive made a crucial specification concerning the substantive requirements for the *sui generis* regime, which partially mitigated the broad interpretation of the rights reserved rendered by the same ECJ. Indeed, in **Fixtures Marketing v. OPAP**<sup>29</sup> and in **The British Horseracing v. William Hill**<sup>30</sup>, two disputes both relating to database containing data and information created directly by the makers, the ECJ intervened in the tricky debates on the “sole-source” and/or “spin-off” databases. The Court, without expressly denying the possibility that a sole-source database could be protected with the *sui generis* right, specified that the investments used “*for the creation as such of independent materials*” contained in the database should not be accounted on the investments in the collection, presentation and verification of data, relevant for triggering the *sui generis* protection, as “*the purpose of the protection by the sui generis right provided for by the directive is to promote the establishment of storage and processing systems for existing information and not the creation of materials capable of being collected subsequently in a database*”.

Therefore, the “spin-off theory” (according to which, automatically, no legal protection should be granted for databases that are derivative products from the primary activity) was not literary approved, but it was required the proof of autonomous investments (different from the ones in the “creation” of the data) in collection, presentation or verification of the elements. Such interpretation, is, *de facto*, a

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<sup>27</sup> [Stakeholders consultation](#), cit., pag. 462-468.

<sup>28</sup> “*On the basis of the information available, the evaluation finds that the economic impact of the “sui generis” right on database production is unproven*”, [EU Press release after the evaluation](#), 12 December 2005.

<sup>29</sup> ECJ, *ECJ Fixtures Marketing v. OPAP*, C-444/02, 9 November 2004.

<sup>30</sup> ECJ, *The British Horseracing v. William Hill*, C-203/02, 9 November 2004.

restriction of the substantive requirement of investment and served to avoid monopolies in the sole-source databases.

The same consideration was made by the EU Commission in the **Evaluation Report**, contained in the survey on the EU Directive: “*the ECJ’s narrow interpretation of the “sui generis” protection for “nonoriginal” databases where the data were “created” by the same entity as the entity that establishes the database would put to rest any fear of abuse of a dominant position that this entity would have on data and information it “created” itself (so-called “single-source” databases)*”<sup>31</sup>.

As far as formal requirements (registration or disclosure) are concerned, no rulings or other events have to be reported. To the contrary, in several case-laws in the national Courts, the *sui generis* right has been granted to maker of “internal” databases, with a unnecessary overlapping with other source of laws such as unfair competition and trade secret<sup>32</sup>.

## II.3 - Scope vis-à-vis the other stakeholders

### A- Users

The **Stakeholders Consultation** of 2005 reported distinct remarks on the huge scope of the *sui generis* rights vis-à-vis the possible uses by third parties. Indeed, the majority of the interviewees considered the scope “*too broad*” and a large minority of them opted for “*too uncertain*”, which tended to be read as a blocking element for third parties. More particularly, almost the 50% of them thought that the protection accorded by the art. 7(5) of EU Directive to the database makers against the repeated and systematic extraction and/or reutilisation of insubstantial parts of the database content was overprotective. Furthermore, the large part of the interviewees defined the free acts left to the lawful users “*too narrow*”<sup>33</sup>.

The concerns above reported might be confirmed in the light of a recent decision issued by the Court of Justice, **Ryanair v. PR Aviation**<sup>34</sup>, in which the ECJ concluded that if neither copyright nor *sui generis* regime is applicable, the relationships between the database owner and the users are regulated exclusively by the contractual T&Cs which could be even more strict than the conditions set by the EU Directive.

### B- Competitors

Specific concerns, even if less widespread, have been pointed out also in relation to competitive issues. A relevant minority (almost the 50%) of the interviewee reported in the **Stakeholder Consultation** the fear that the *sui generis* regime had strengthened the legal barrier and the power of the dominant positioners in the market; the same number saw the chance to introduce forms of non-voluntary licences as a necessary measure<sup>35</sup>.

Again, the concerns might be reaffirmed after a recent ruling, **Innoweb v. Wegener**<sup>36</sup>, where the ECJ interpreted the non-licensed use of data from a database *via* linking in a meta search engine as an act restricted by the *sui generis* right. The decision confirmed the extensive definition of the reserved rights, blocking any kind of derivative uses not-authorized by the database maker.

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<sup>31</sup> [Evaluation report](#), cit., pag. 14.

<sup>32</sup> See my article, in Italian, A. ANDOLINA, *La tutela autoriale e sui generis delle banche dati*, Lex24-Guida al Diritto, (2016).

<sup>33</sup> [Stakeholders consultation](#), cit., pag. 477-481.

<sup>34</sup> ECJ, *Ryanair v. PR Aviation*, C-30/14, 30 January 2015.

<sup>35</sup> [Stakeholders consultation](#), cit., pag. 521-522.

<sup>36</sup> ECJ, *Innoweb v. Wegener*, C-202/12, 19 December 2013.

## C- Researchers

As far as scientific research is concerned, the **Stakeholders Consultation** reported a common perception that the exceptions contained in the EU Directive were few and “*too narrow*”, a part of the crucial problem of their facultative nature for the Member States<sup>37</sup>.

The point may be partially solved in case of adoption of the **Proposal of Directive on the Digital Single Market** (DSM Prop. Dir.) issued by the EU Commission on 14 September 2016, part of the “Copyright Pack”<sup>38</sup>. The DSM Prop. Dir. aims to introduce mandatory exceptions to several copyright legislations, among which the Dir. 9/1996/EC, providing “*for rules to adapt certain exceptions and limitations to digital and cross-border environment*” (Recital 3) and starting from the consideration that “*the optional nature of exceptions and limitations provided for in Directives ... 96/9/EC ... in these fields may negatively impact the functioning of the internal market*” (Recital 5).

Particularly in the field of scientific research, since “*research organisations such as universities and research institutes are confronted with legal uncertainty as to the extent to which they can perform text and data mining of content*”, the DSM Prop. Dir. seeks the adoption of specific mandatory exception for **text and data mining**, which “*may involve acts protected by copyright and/or by the sui generis database right, notably the reproduction of works or other subject-matter and/or the extraction of contents from a database*” (Recital 8).

The definition of text and data mining is done in Art. 2 of the DSM Prop. Dir., according to which it “*means any automated analytical technique aiming to analyse text and data in digital form in order to generate information such as patterns, trends and correlations*”.

The proposed exception is contained in Art. 3<sup>39</sup> and its beneficiaries would be the research organisations which had a lawful access to the database. Any contractual provision contrary to the exception shall be unenforceable. Since the non-competing nature of the uses allowed with the exception, no equitable compensation would be prescribed.

## D- Special users

The **DSM Prop. Dir.** contains two further mandatory exceptions which would impact also on the Dir. 9/1996/EC.

One is dedicated to **digital and cross-border teaching activities** and it is regulated in Art. 4<sup>40</sup>, covering “*both uses through digital means in the classroom and online uses through the educational*

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<sup>37</sup> [Stakeholders consultation](#), cit., pag. 485.

<sup>38</sup> All the information and documentation on the “Copyright Pack” are available at this [link](#).

<sup>39</sup> “1. Member States shall provide for an exception to the rights provided for in Article 2 of Directive 2001/29/EC, Articles 5(a) and 7(1) of Directive 96/9/EC and Article 11(1) of this Directive for reproductions and extractions made by research organisations in order to carry out text and data mining of works or other subject-matter to which they have lawful access for the purposes of scientific research.

2. Any contractual provision contrary to the exception provided for in paragraph 1 shall be unenforceable.

3. Rightholders shall be allowed to apply measures to ensure the security and integrity of the networks and databases where the works or other subject-matter are hosted. Such measures shall not go beyond what is necessary to achieve that objective.

4. Member States shall encourage rightholders and research organisations to define commonly-agreed best practices concerning the application of the measures referred to in paragraph 3”.

<sup>40</sup> “Member States shall provide for an exception or limitation to the rights provided for in Articles 2 and 3 of Directive 2001/29/EC, Articles 5(a) and 7(1) of Directive 96/9/EC, Article 4(1) of Directive 2009/24/EC and Article 11(1) of this



*establishment's secure electronic network, the access to which should be protected, notably by authentication procedures*" (Recital 17). The introduction of such exception is considered necessary by EU Commission, since it is "*unclear*" if the existing exceptions for teaching purposes are applicable also in case of digital use and of online/at distance learning (Recital 14).

The proposed exception would introduce also a proportionality test for its application, not being enforceable where a sufficient set of licences was present, and prescribe a fair compensation mechanism, since the quasi/or potential-competing nature of the uses allowed by the limitation.

The other exception would concern the **preservation of cultural heritage** and is contained in Art. 5<sup>41</sup>. According the EU Commission, "*digital technologies offer new ways to preserve the heritage contained in those collections but they also create new challenges*" and "*it is necessary to adapt the current legal framework by providing a mandatory exception*" (Recital 18), which permits "*cultural heritage institutions to reproduce works and other subject-matter permanently in their collections for preservation purposes, for example to address technological obsolescence or the degradation of original supports*" (Recital 20). Due to the narrowness of the scope of the exception, which should not be too harmful for the rightholders, no fair compensation would be prescribed.

For the sake of completeness, it should be mentioned another further exception that could be introduced in case of approval of the **Proposal of Directive** on certain permitted uses of works and other subject-matter **for the benefit of persons who are blind, visually impaired or otherwise print disabled**, even this part of the Copyright Pack<sup>42</sup>. The Proposal of Directive, implementing the provisions of the Marrakech Treaty on the same matters, should introduce the exception contained in its art. 3, allowing "any acts necessary for: (a) a beneficiary person, or a person acting on their behalf, to make an accessible format copy of a work or other subject-matter for the exclusive use of the beneficiary person; and (b) an authorised entity to make an accessible format copy and to

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Directive in order to allow for the digital use of works and other subject-matter for the sole purpose of illustration for teaching, to the extent justified by the non-commercial purpose to be achieved, provided that the use:

(a) takes place on the premises of an educational establishment or through a secure electronic network accessible only by the educational establishment's pupils or students and teaching staff;

(b) is accompanied by the indication of the source, including the author's name, unless this turns out to be impossible.

2. Member States may provide that the exception adopted pursuant to paragraph 1 does not apply generally or as regards specific types of works or other subject-matter, to the extent that adequate licences authorising the acts described in paragraph 1 are easily available in the market. Member States availing themselves of the provision of the first subparagraph shall take the necessary measures to ensure appropriate availability and visibility of the licences authorising the acts described in paragraph 1 for educational establishments.

3. The use of works and other subject-matter for the sole purpose of illustration for teaching through secure electronic networks undertaken in compliance with the provisions of national law adopted pursuant to this Article shall be deemed to occur solely in the Member State where the educational establishment is established.

4. Member States may provide for fair compensation for the harm incurred by the rightholders due to the use of their works or other subject-matter pursuant to paragraph 1".

<sup>41</sup> "Member States shall provide for an exception to the rights provided for in Article 2 of Directive 2001/29/EC, Articles 5(a) and 7(1) of Directive 96/9/EC, Article 4(1)(a) of Directive 2009/24/EC and Article 11(1) of this Directive, permitting cultural heritage institutions, to make copies of any works or other subject-matter that are permanently in their collections, in any format or medium, for the sole purpose of the preservation of such works or other subject-matter and to the extent necessary for such preservation".

<sup>42</sup> All the information and documentation on the "Copyright Pack" are available at this [link](#).

communicate, make available, distribute or lend an accessible format copy to a beneficiary person or authorised entity for the purpose of exclusive use by a beneficiary person”.

#### II.4 - Duration and renewal

As for the term of duration and the renewal mechanism, the **Stakeholders Consultation** reported a clear consensus on the consideration that they were “*too long*” and definitely “*overprotective*”<sup>43</sup>. Nevertheless, there are no judicial or legislative events to be reported which gave the indication of a sort of re-thinking on the topic.

#### II.5 - Enforcement

The *ex ante* functioning of the *sui generis* approach and the legal certainty derived from it for both the rightholders and the other parties rests one of the most appreciate characteristics of the EU Directive. This was confirmed by the **survey**, which concluded on this point that “*the European publishing industry... argued that “sui generis” protection is crucial to the continued success of their activities. In addition, most respondents to the online survey believe that the “sui generis” right has brought about legal certainty, reduced the costs associated with the protection of databases, created more business opportunities and facilitated the marketing of databases*”<sup>44</sup>.

#### II.6 - Public domain and legal status of data

The impact that **Fixtures Marketing v. OPAP** and **The British Horseracing v. William Hill** had on the interpretation of the substantive requirements for the *sui generis* right, especially regarding the sole-source database, was welcomed as beneficial also to avoiding excessive monopolisation of information. Also the **Evaluation Report** of the survey of 2005, in considering if “*Sui generis protection comes close to protecting data as property*”, concluded that “*there is a long-standing principle that copyright should not be extended to cover basic information or “raw” data. However, as evidenced by the ECJ’s differentiation between the “creation” of data and its obtaining demonstrate, the “sui generis” right comes precariously close to protecting basic information*”<sup>45</sup>.

However, in reporting such considerations, the overall impression should not be so optimistic: the ECJ interpretation do not impede to claim *sui generis* protection to a sole-source database, simply rendering the case more difficult and rare.

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<sup>43</sup> [Stakeholders consultation](#), cit., pag. 493-505.

<sup>44</sup> [EU Press release after the evaluation](#), 12 December 2005

<sup>45</sup> [Evaluation report](#), cit., pag. 25.

## TABLE

*The EU sui generis regime after the recent trends*

<b>Nature of regulation</b>	Exclusive property right
<b>Requirements</b>	
- <b>Substantive requirement</b>	Substantial investment (qualitative/quantitative) in obtaining, verification and presentation of data. Investment in data creation is not accounted in “obtaining”.
- <b>Formal requirement (disclosure or registration)</b>	No formal requirement (disclosure or registration)
<b>Scope vis-à-vis the other stakeholders</b>	Some exception and limitation are <b>mandatory</b>
• <b>Users</b>	Extraction and reutilization of insubstantial parts, unless repeatedly and systematically (three-steps-test). If neither copyright nor sui generis is applicable, contractual T&C could be more strict.
• <b>Competitors</b>	Any use without right-holder’s consent. Furthermore: <ul style="list-style-type: none"> <li>• wide interpretation of “extraction”;</li> <li>• wide interpretation of “reuse”.</li> </ul> No room for derivative uses.
• <b>Researchers</b>	<ul style="list-style-type: none"> <li>- Facultative exception, if lawful user.</li> <li>- <b>Text and data mining for scientific research (mandatory).</b></li> </ul>
• <b>Special users</b>	<ul style="list-style-type: none"> <li>- Facultative exception, if lawful user.</li> <li>- <b>Digital and online uses for learning and teaching activities (mandatory).</b></li> <li>- <b>Preserving cultural heritage (mandatory).</b></li> <li>- <b>Blind and visual impaired (mandatory).</b></li> </ul>
<b>Duration and renewal</b>	15 years, renewable if new substantial investment.
<b>Enforcement (ex ante / ex post)</b>	Ex ante.
<b>Public domain and legal status of data</b>	De facto ownership of data contained in database. Mitigation of the risk of monopolisation of information (the sole-source databases). Still ownership on data as stock and potential perpetuity.

## Conclusions

As already said, the real alternative is not simply between a model or another one, since, depending on how they are designed, they could result in either over-protection or under-protection or both paralyzing the market, impairing the access to the information and leading legal uncertainty. The real alternative is between an approach that tends to protect investments *per se*, no matter what their outcome are, and another one that, once assured the fair conditions to compete avoiding free riding, leaves to the market the task to determine if the investment is successful or not. In other words, the challenge is between protectionism or competition.

These considerations do not lead inevitably to the refusal of an exclusive property rights approach as such. As above mentioned, in certain cases such approach is considerable the more pro-competitive, leaving to the market and to the free transaction between the stakeholders the role to set price and conditions of the intangible products. In other words, the protectionist temptation is not in the right in itself but in the lack of the proper counterbalances which neutralize the monopolistic rigidities and preserve the public domain, the dissemination of knowledge and the development.

The key point is how the function of IPRs is considered. If they are interpreted and used as a tool to protect investment as such, the trend is towards protectionism; and IPRs became something that they were not at the beginning: IPRs should be about knowledge - sure as a *result* of investment - in the form of either a technical innovation (patent), or in the form of a creative contribution or expression (copyright). The protection of the investment, *per se*, belongs to policies with a clear anti-competitive nature.

At the end of the day, as far as policy is concerned, the investment, as such, does not deserve to be protected at all and never. To the contrary what the new challenges require is simply to put the investor in the proper condition to compete, i.e. to leave the market doing its job.

The recent trends regarding the EU Directive, above illustrated, reveal a more conscious approach of the negative effects of the proprietary-right structure and constitute attempts to design a more open system. Unfortunately, the comparison with the compensatory liability rule proposed by Prof. Reichman shows that the road for a pro-competitive solution is still long.

In particular, the outstanding concerns are related to *i*) the limitation of the right to only the public databases, with a requirement of either disclosure or registration; *ii*) the introduction of a mechanism to allow and regulate the derivative and transformative databases, with equitable compensations; *iii*) the restoring and the preservation of the public domain.

### A- Registration or disclosure

One of the most impressive characteristic of “hybridness” of the EU *sui generis* regime is that it puts together the broadest scope of the rights, as in patents, and the lack of formality requirements (disclosure/registration), as in copyright, deriving from it a totally unproportioned regime in favour of the rightholders, pretty unique in comparison with the other IPRs.

Traditionally, the lack of formalities is justified by more limited rights and, instead, a stronger right is accompanied with a formal requirement. The latter is necessary to certify publically the existence of the right and promote with disclosure the public interest of the dissemination of knowledge, which is the “contractual obligation” of the inventor against the monopoly he obtained (the “contractual obligation” of the society) in the ideal deal between them.

From this point of view, the EU *sui generis* regime does not appear as a so convenient agreement for the European society. Either a formal requirement (registration) or simply disclosure would restore this distortion and have some relevant beneficial effects:

- i) in the judicial practice, it would avoid overlapping with the proper measure of unfair competition and trade secret, which leads to unpredictability and to overprotection;
- ii) in the daily practice, it would assure more certainty for the users, which would know in advance that a not registered or publically available database would not be protected with the *sui generis* regime, and for the rightholder, simplifying their burden of the proof;
- iii) from a theoretical point of view, which is not to be underestimate, it would make the *sui generis* regime coherent with the other IPRs regulation, following the traditional rule of strong right/registration or disclosure for society.

The formal requirement could be a *registration* to the Copyright Office, with formal or substantive examination. That would be the hard option, requiring more governmental intervention of investments and resources, but leading the higher degree of certainty and predictability for all the stakeholders.

In alternative, it could require a simple *disclosure*, prescribing the starting of the term of protection “*from the making available to the public of the database by the maker*” (in order to avoid any case of abuse by third parties). In this latter case, the classical terms of the IP deal would be restored; moreover, no governmental intervention through the Copyright Office should be needed; and a minimum degree of certainty would, at least, assured, since the date of the making available to the public might be certainly more simple to be found and proven than the day of the completion of the database.

## B- Derivative databases

A mechanism which impedes the blocking effects of the monopoly structure should be introduced, in order to have more dynamic and competing system, allowing derivative and transformative uses of the databases. The subject-matter would be the creation of “*new product*” or “*innovative improvements of existing products*”, borrowing notions already known and practiced in the European environment through the essential facility doctrine, the antitrust theory developed to impede abuse of dominant position<sup>46</sup>.

Again, different options with a gradual degree of intensity could be considered.

The softer approach would be the promotion of *best-practices* between the stakeholders who are able to self-regulate the cooperation among them, taking inspiration from similar experiences, as the patent pools. The States could intervene with guidelines and other soft-law sources or, perhaps, with stronger measure as fiscal benefits.

Some mandatory and more general measures could be adopted for a stronger approach. Ad hoc *exceptions and limitations*, against equitable compensation, could allow at the degree chosen by the State the derivative and transformative use, considering several criteria, as the amount of data used, the purposes, the commercial or non-profit nature, and the value-added nature of the new product.

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<sup>46</sup> ECJ, *RTE v. Commission*, C-241/91 P and C-242/91 P. (*Magill*); ECJ, *IMS Health v. NDC Health*, C-418/01 (*IMS*); ECJ, *Microsoft v. Commission*, Case T-201/04 (*Microsoft*).

The strongest approach would be the introduction of a set of *statutory licences*, maybe with predetermined terms and fees, using the same criteria above mentioned, with a solution that comes very close to the menu of users of Prof. Reichman's compensatory liability rule.

### C- Public domain

The possible adoption of the new mandatory exceptions of the DSM Prop. Dir. and of the Directive of implantation of the Marrakech Treaty would be a clear beneficial effect to the restoration of some spaces of public domain. Unfortunately, these new exceptions, due the sectorial impact they would have, are not enough and some more measures should be taken in order to preserve the public domain.

Firstly, the new exceptions would be mandatory only for *digital uses*, deriving that they should apply only to electronic and digital database. An express reference to the mandatory enforceability to all kind of database might be opportune.

Secondly, also the existing exceptions of the EU Directive should be *mandatory*, allowing all kind of uses for scientific research (not only text and data mining) and teaching activities (not only online and at distance learning). Furthermore, the exceptions should be extended to anyone and not only to the lawful users.

Finally, the *term* of duration should be possibly reduced (10 years as in the original proposals) and the *renewal mechanism* should be abolished. Such measures, together with the introduction of a formal requirement, would have a beneficial impact in terms of certainty for all the stakeholders and determine properly the falling in the public domain of the database.



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