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Accessing and Licensing Government Data under Open Access Conditions

Paper written by

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1. INTRODUCTION

Public sector information (PSI) is intended as the whole of information that EU public sector bodies produce and collect in the course of their institutional duties or for which they pay. Such a complex of information, which can include geographical, meteorological, legal, financial, statistical and other types of data, is considered to be 'open' when these data can be easily and promptly accessed and re-used by anyone through an Internet connection with no legal or technical barriers limiting such opportunity.

Maximizing the value of PSI re-use ranks high on the list of priorities identified in the context of the EU 2020 strategy, aimed at taking Europe's economies on a path of growth, innovation and sustainability. As part of the Digital Agenda for Europe,¹ on 12 December 2011 the European Commission launched an Open Data Strategy for Europe,² expected to generate a € 40 billion-per-year boost to the EU economy.³

Indeed, further opening up the re-use of governmental data would provide significant benefits to citizens, businesses and to public sector bodies themselves: open data is an essential tool in order to enhance the transparency of governmental action and to create a model of more inclusive democracy, besides having the potential to lead to better evidence-based policy making.

Additionally, open public data represents the precious raw material for a series of information products and services, which can contribute greatly to economic growth and job creation.⁴

According to a recent study, the total direct and indirect economic gains deriving from easier PSI re-use across the EU27 would be around € 140 billion annually.⁵

Amongst the various legislative and policy initiatives undertaken at the EU level in the last decade in order to foster access to, re-use and sharing of public data, Directive 2003/98/EC (the 'PSI Directive') on the re-use of public sector information certainly plays a primary role.

The PSI Directive harmonized the conditions for the re-use of PSI throughout Europe by introducing basic principles as to non-discrimination, charging, licensing, transparency and exclusive arrangements.

^{1&}lt;http://ec.europa.eu/information_society/digital-agenda/index_en.htm>.

²http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/11/891&format=HTML&aged=0&language=en&guiLanguage=en">http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/11/891&format=HTML&aged=0&language=en&guiLanguage=en">http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/11/891&format=HTML&aged=0&language=en&guiLanguage=en">http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/11/891&format=HTML&aged=0&language=en&guiLanguage=en">http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/11/891&format=HTML&aged=0&language=en&guiLanguage=en">http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/11/891&format=HTML&aged=0&language=en&guiLanguage=en">http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/11/891&format=HTML&aged=0&language=en&guiLanguage=en">http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/11/891&format=HTML&aged=0&language=en&guiLanguage=en">http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/11/891&format=HTML&aged=0&language=en&guiLanguage=en&

³ More specifically, the Open Data package consists of three elements: a Communication from the Commission, 'Open Data: An engine for innovation, growth and transparent governance' (available at http://ec.europa.eu/information_society/policy/psi/docs/pdfs/opendata2012/open_data_communication/opendata_E_n.pdf); a proposal for reviewing Directive 2003/98/EC on the Re-Use of Public Sector Information (at http://ec.europa.eu/information_society/policy/psi/docs/pdfs/opendata2012/revision_of_PSI_Directive/proposal_directive_EN.pdf); and a revision of the Decision governing re-use of Commission's own information (Decision 2006/291/EC).

⁴ On the occasion of the press conference dedicated to the launch of the Open Data Strategy Commission, Vice President Neelie Kroes said: Just as oil was likened to black gold, data takes on a new importance and value in the digital age. Web entrepreneurs assemble and sell content and applications and advertising, based on data. With those efforts they make our lives more convenient and they keep authorities accountable. They live on data, and increasingly so do the rest of us. Today, I am proud to present an Open Data package that can drastically increase the possibilities for those web entrepreneurs; the opportunities of businesses, journalists, academics and all citizens, in fact, to generate new and rich content. Today's package will radically shake-up how the EU institutions and most public authorities in Europe share their data. Public data, generated by all administrations in Europe will become automatically re-usable. It will feed new applications and services. It will change the way administrations are working – for the good of the administrations and the people they serve. This is a victory for those of us who believe that the best way to get value from data is to give it away.[...]In short, ladies and gentlemen, my message today is that data is gold. We have a huge goldmine in public administration. Let's start mining it. Start releasing your data now. Join the future. Join the growth.'

⁵ G Vickery, Review of recent studies on PSI re-use and related market developments, August 2011.

The PSI Directive does not affect the existence, ownership or exercise of the intellectual property rights held by public sector bodies (intended as copyright and related rights, including sui generis forms of protection). On the other hand, the directive encourages Member States to exercise their intellectual property rights in a way that facilitates re-use. More specifically, licensing does not appear as a precondition for re-use: according to article 8 of the PSI Directive, public sector bodies may authorize the re-use of documents without conditions or may impose conditions, where appropriate through a license and preferably by resorting to a standard license.

This study aims at exploring how to best ensure the re-use of governmental data in Europe, with special reference to public sector databases and to the legal solutions which can be necessary for managing the level of IP protection that may subsist in such collections of governmental data. In fact, Directive 96/9/EC (the 'Database Directive') introduced a new, purely European, legal phenomenon: a sui generis (or 'database') right aimed at protecting the investments made by the producer of a nonoriginal database in the collection, verification or presentation of the contents of a database. The Database Directive seems not to exclude public databases from qualifying for the sui generis protection; therefore, the research also seeks to examine the interface between the Database Directive's and PSI Directive's regimes and the possible solutions for maximizing the re-use of both protected and unprotected public datasets.

Part 1 seeks to offer an overview of the legal framework for database protection in Europe by analysing the Database Directive's provisions and the interpretation of its key terms provided by the European Court of Justice. The chapter aims at exploring if and in which measure - according to the Database Directive's provisions (and to its national implementations) and following the European Court of Justice ('ECJ') criteria – a state's database qualifies for sui generis protection and public sector bodies can be considered database producers.

Part 2 provides an analysis of the provisions of Directive 2003/98/EC on the re-use of public sector information (the 'PSI Directive'), as the main legislative initiative adopted in recent years at the European level to enhance the value of public informative resources. In particular, of special interest for the purpose of this study are the provisions of the PSI Directive dealing with the issue of IPRs owned by PSI-holders and with the licensing of public information.

The analysis is complemented by the reference to the major studies carried out so far with regard to the Directive's impact (including the proposal for reviewing the Directive presented by the European Commission on 12 December 2011) and to other legislative initiatives in specific sectors (particularly environmental and geospatial information).

Finally, building on the interface between the conclusions of the first part and on the provisions of the PSI Directive directly or indirectly dealing with the issue of licensing, the third part aims firstly at analysing when re-use initiatives can take place with 'no rights reserved' conditions (and when, consequently, public bodies should be encouraged to adopt these schemes), and secondly at exploring which solutions are available in the domain of open content licensing where the adoption of a license is needed.

⁶ In the course of this study, the term 'database' is intended as meaning a collection of data, which can be protected, either by copyright or by a sui generis right (depending, as we will see, on the jurisdiction and on the fact that the relevant criteria for protection are met) or remain unprotected. To refer to unprotected collections of data or to collections of data without further specifying the level of their organization, the term 'dataset' is also used to refer generically to a collection of data. Therefore, to a certain extent, the terms database and dataset are interchangeable, but when referring to a protected, organized collection of data, only the term database will be used.

The study embraces, in a comparative perspective, two main categories of open content licensing schemes applicable to public sector information and databases: on the one hand, international licensing models such as Creative Commons (CC) and Open Data Commons (ODC), and, on the other hand, a number of national schemes recently launched, such as the UK Open Government License (OGL), the French Licence Ouverte (LO), the Italian Open Data License (IODL) and the Norwegian Open Data License (NODL).

The analysis of the features of these licenses and of the way such models deal with data and databases provides the necessary basis for finally addressing a series of ultimate questions: What is the best way to ensure the re-use of public datasets in compliance with the principles set by the PSI Directive and in consideration of the fact that these collections can be covered by the *sui generis* right? Which licensing models are more effective in maximizing and simplifying borderless (European and extra-European) flow and re-use of open data? Is it recommendable to concentrate the efforts of the various open data initiatives towards more harmonized licensing solutions?

2. DIRECTIVE 96/9/EC AND THE DATABASE SUI GENERIS RIGHT

INTRODUCTION

The European Database Directive has been in force for over fifteen years since it was adopted on 11 March 1996. The established a unique two-tier protection scheme for electronic and non-electronic databases, according to which Member States are required to protect databases by copyright as intellectual creations and to introduce a new (purely European) legal creature: a *sui generis* (or 'database') right aimed at preventing unauthorized acts of extraction or reutilization of the contents of a non-original database that could harm the investment made by the producer.

Since many of the key terms used in the Directive to define the scope and condition of the *sui generis* right appeared to be unclear or difficult to interpret, it was left to the courts – and particularly to the European Court of Justice (ECJ) – to offer guidance on such issues.

The first part of this chapter will deal with the process that led to the drafting and adoption of Directive 96/9/EC, while the second part will offer an overview of the Directive's provisions, analysed in the light of the ECJ rulings concerning the interpretation of the Database Directive's key terms. The third and last part will then be dedicated to the application of the ECJ's criteria to governmental data, also by exploring whether there is any ground for qualifying public sector bodies as database producers.

2.1 THE DRAFTING HISTORY OF THE DIRECTIVE

The origins of the debate that led to the adoption of Directive 96/9/EC on the legal protection of databases date back to the late eighties. In 1987 a European Commission's Communication⁸ stressed the gap that existed between the European database market and the more thriving North American database industry and manifested the intention to harmonize European legislation in order to remove the legal obstacles thwarting the growth of EU information services.

In 1988 the European Commission published a Green Paper⁹ that raised the question whether databases which do not qualify for copyright protection should be protected against unauthorized reproduction, considering that the collection of the contents represents a substantial investment for database makers. In fact, at that time, the protection for the investment in making databases by means of copyright varied consistently throughout Europe. In the UK, for instance, databases were sufficiently protected by copyright since the required threshold of originality was quite low (sufficient skill, judgment and labour) and also covered the contents. But in almost all other Member States,

⁷ Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases, OJ L77/20, 27 March 1996.

⁸ Communication from the Commission together with a draft decision concerning the establishment at community level of a policy and plan of priority action for the development of an information service market; COM(87) 360/2 final, Brussels, 2 September 1987.

⁹ Green paper on Copyright and the Challenge of Technology – Copyright issues requiring immediate action, COM(88) 172 final, Brussels, 30 January 1989, pp 205-217.

copyright did not protect the investment in the production of databases, covering exclusively the database's structure provided that it was original.¹⁰

In 1992 the European Commission issued its first proposal for a Database Directive, which exclusively concerned electronic databases. According to its views, the level of protection for European databases had to be comparable to the one provided for in the United States, where compilations of works and data fixed in any medium enjoyed copyright protection on the basis of a minimal quantum of creativity in the compilation's selection or arrangement, requiring the mere investment of skill, labour and money. Such an approach, based on the so-called 'sweat of the brow' doctrine, was overturned by the US Supreme Court in 1991 in the Feist judgment. In this case, relating to the copying of a telephone directory of Rural Telephone, the Supreme Court ruled that mere collections of facts (such as lists of names in alphabetical order in a telephone catalogue) do not meet the standard of creativity for copyright protection and thus established a higher threshold of creativity, indeed comparable to the one applied in continental Europe. Such an overruling suggested to the European Commission not to delegate the protection of databases entirely to copyright: thus, in its First Proposal the Commission presented a double-layered system of protection for databases, where a second form of protection – besides copyright – was introduced and modelled on the principles of unfair competition.

The First Proposal applied copyright protection to electronic databases containing both works or (noncopyrighted) collections of materials which, by reason of their selection or arrangement, constituted the author's own intellectual creation. The First Proposal therefore extended the protection provided under the Berne Convention, which applies only to compilation of works, namely exclusively to databases consisting of copyrighted contents. But the main innovation of this first draft lay in the fact that it introduced the abovementioned two-tier protection system, where a sui generis right was to be conferred by the Member States to the maker of a database in order to prevent the unauthorized extraction or reutilization of the database's contents, in whole or in substantial part, for commercial purposes. 14 Such a protection was clearly designed on principles of unfair competition, since the right was limited to unfair extraction and re-utilization for commercial purposes (for a period of 10 years). Moreover, such limited protection did not apply if a copyright already subsisted in the contents of the database and was subject to a number of exceptions and to a requirement of compulsory licensing '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'.15 An analogous provision was drafted with reference to databases made publicly available by a public body 'which is either established to assemble or disclose information pursuant to legislation, or is under a general duty to do so'.16

The *sui generis* regime underwent significant amendments as to its nature and extent during the process that led to the adoption of the final text: in particular, the Common Position adopted by the Council on

¹⁰ On the lack of uniformity throughout Europe in the standard of copyright protection for databases, see E Derclaye, *The Legal Protection of Databases. A Comparative Analysis*, Edward Elgar Publishing: Cheltenham, 2008, p 45 and also M Davison, *The Legal Protection of Databases*, Cambridge University Press, 2003, ch 2.

¹¹ Proposal for a Council Directive on the legal protection of databases, Brussels, 13 May 1992, COM(92) 24 final, OJ 1992 C 156/4.

¹² On the standard of copyright protection for databases adopted in the United States before the Feist decision (and on the effects of such decision on the drafting process of the Database Directive), see A Beunen, *Protection for Databases. The European Database Directive and its effects in the Netherlands, France and the United Kingdom*, Wolf Legal Publishers, 2007, pp 6-7.

¹³ Feist publications, Inc. v Rural Telephone Service Company, Inc., 449 US 340 (1991).

¹⁴ Art 2.5 of the First Proposal.

¹⁵ Art 8.1 of the First Proposal.

¹⁶ Art 8.2 of the First Proposal.

10 July 1995¹⁷ represents the main basis of the Directive in its final version, which was finally adopted on 11 March 1996.

As suggested by many commentators, the final *sui generis* right hardly resembles the one initially designed, having been narrowed and expanded at the same time. On the one hand, the scope of protection was restricted to the whole database or to a qualitatively or quantitatively substantial part thereof; furthermore, the protection was limited to producers who substantially invest in the obtaining, collection or verification of the database's contents. On the other hand, the duration of the right was extended to 15 years and applied to both electronic and non-electronic databases, irrespective of the subsistence of copyright in the database's contents. Furthermore, the deletion of the compulsory licensing requirements and the abolishment of the provision subordinating the infringement to commercial purposes deprived this right of the features that connected it to the realm of unfair competition. ¹⁸ It rather turned into a broad exclusive property right, capable of being subsequently transferred, assigned or licensed and presenting the features that will be described and analysed in the following paragraphs.

2.2 AN OVERVIEW OF THE DIRECTIVE

This paragraph aims at providing a general overview of the structure and content of the Database Directive by dedicating a first description to the Directive's provisions, which are read in connection with the numerous recitals preceding the articles and in the light of the interpretation given to such concepts by the ECJ jurisprudence.

2.2.1 *SCOPE*

The first article of the Directive is dedicated to the identification of the scope of the Directive, namely the legal protection of databases in any form – including non-electronic databases¹⁹ – and to the definition of a 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'. ²⁰ It furthermore states that the Directive's protection shall not extend to 'computer programs used in the making or operation of databases'.

Article 2 clarifies that the Directive shall apply without any prejudice to other European provisions on copyright matters, such as the legal protection of computer programs, the rental and lending right and the term of copyright protection.

¹⁷ Common Position n 20/95 regarding the Proposal for a Council Directive on the legal protection of databases, OJEC 1995, C288/14.

¹⁸ On the shifting of the principles underlying the draft Directive from unfair competition to an approach based on exclusive rights, see M Davison, *Database Protection. The Commodification of Information*, in PB Hugenholtz & L Guibault (eds), *The Future of the Public Domain – Identifying the Commons in Information Law*, Kluwer Law International, The Hague, 2006, p 181.

¹⁹ Recital n 14 reads: 'Whereas protection under this Directive should be extended to cover non-electronic databases'.

²⁰ See Beunen (2007), pp 52-70 and E Derclaye, What is a Database? – A Critical Analysis of the Definition of a Database in the European Database Directive and Suggestions for an International Definition, Journal of World Intellectual Property, 2002/6, pp 981-1011.

2.2.2 COPYRIGHT

Chapter II is a response to the need for harmonizing the standard of copyright protection for databases within the EU, considering that the standard of originality for such protection presented significant differences prior to the adoption of the Directive. ²¹

According to article 3.1, copyright protection is conferred to 'databases which, by reason of the selection or arrangements of their contents, constitute the author's own intellectual creation'. Such a requirement of originality must be met in the selection or arrangement of the database's contents; thus, the copyright protection offered by the Directive concerns the original structure of the database, while the specific contents in themselves are not covered by this scope of protection.

Article 4 states that a copyright is held by the author of the database, intended as the natural person or group of natural persons who created the database or the legal person designated as the copyright holder by the legislation of a Member State. When a Member State recognizes a special regime for collective works, economic rights shall be vested in the person holding the copyright; for databases made by a group of natural persons jointly, copyright shall be owned jointly (art 4.3).

Article 5 mentions the series of exclusive economic rights that pertain to the copyright holder, namely the right of reproduction, ²² adaptation, distribution and communication to the public.

Four copyright exceptions are listed in article 6. Member States are free to adopt these, while at the same time being allowed to leave their national exceptions coexisting with these. The first of these exceptions – intended as a minimum use right that cannot be overridden by contract – authorizes the lawful user to access a database and make normal use of it, performing any of the acts set out in article 5. Paragraph n 2 lists three other exceptions regarding the private use of non-electronic databases, illustration for non-commercial teaching or scientific purposes – as long as the source is indicated – and use for the purposes of public security of an administrative or judicial procedure.

2.2.3 THE SUI GENERIS RIGHT AND THE ECJ RULINGS ON THE DATABASE DIRECTIVE

The main element of novelty of the Database Directive is represented by the introduction of a *sui generis* right aimed at protecting the investment incurred in the production of a database. The following paragraphs will focus on the analysis of the pre-requisites of this protection and on the meaning of some of its core features in light of the jurisprudence of the ECJ.

²¹ See footnote 4.

See rootnote 4

²² Art 5 (1) of the Directive 2001/29/EC of 22 May 2001 on the harmonization of certain aspects of copyright and related rights in the information society has introduced a mandatory exception for temporary reproductions of a technological nature which lack economic significance. It is therefore expected that the reproduction right as it is stated in the Database Directive will be adapted to this compulsory exception on the occasion of the next Directive's review.

2.2.3.1 Scope and condition of the sui generis right

Article 7 introduces a previously unknown *sui generis* right for the protection of databases that undoubtedly represents the key element and main purpose of the Database Directive. The *sui generis* right is conferred on a database maker who demonstrates that a substantial investment, either quantitatively or qualitatively, was incurred either in obtaining, verifying or presenting the contents of a database.

Therefore, contrary to copyright, no originality is required in order to trigger the *sui generis* protection, but the rationale and sole condition for it is the substantial nature of the investment made.²³ The Directive does not provide any precise parameter as to the determination of the substantiality threshold – nor does it define the qualitative or quantitative character of the substantial investment, which of course makes it necessary for the courts to assess the investment on a case-by-case basis. In fact, it is left to the recitals to offer an indication as to what investment could be relevant.

Recital 7 states that 'the making of databases requires the investment of considerable human, technical and financial resources'. Recital 39 remarks that database producers enjoy protection 'for the result of the financial and professional investment', while recital 40 specifies the nature of the investment, which can be financial or result from time, energy or efforts.

The substantiality of the investment can be satisfied in the context of three alternative activities: in the obtaining, verification or presentation of the database's elements. These terms are not further defined in the Directive, but the ECJ intervened to fill the gap and provide guidance on such issues.²⁴ In fact, the very first questions addressed to the Court in 2002 asked it to interpret these notions, with particular reference to the scope of the term 'obtaining'.

2.2.3.1.1 Horse races and football fixtures: the ECI provides its first interpretation of the database right

Several questions were referred to the European Court of Justice in 2002 concerning some of the most significant (and unclear) issues of the Directive. Significantly, the Court clarified the definition of substantial investment, drew a distinction between costs connected to 'obtained' and 'created' data and elaborated on the correlation between investment and infringement.²⁵ Despite leaving a number of questions undetermined, by dealing with such topics the ECJ undoubtedly provided the first clarification of some of the most controversial aspects of the Directive and placed a relevant restriction on the scope of the *sui generis* protection.

In fact, on 9 November 2004, the ECJ issued four important decisions on a series of cases all concerning databases of sporting information: a case regarding databases of horseracing results realized by the British Horseracing Board (the 'BHB' case) and a Swedish, Greek and Finnish case related to football fixtures lists (the 'Fixtures' cases).²⁶

²⁵ For a thorough analysis of the ECJ's judgments of 9 November 2004, see MJ Davison & PB Hugenholtz, Football Fixtures, horse races and spin-offs: the ECJ domesticates the database right, EIPR, 2005/3, pp 113-118 and Derclaye (2008), pp 55-149.

²³ Beunen (2007), p 29; Derclaye (2008), pp 72-99.

²⁴ See the following paragraph 1.3.

²⁶ British Horseracing Board Ltd v William Hill Organization Ltd (BHB decision), c-203-02, [2004] ECR I-10415; Fixtures Marketing Ltd v Svenksa AB (Svenska), C-338/02, [2004] ECR I-10497; Fixtures Marketing Ltd v Organismos Prognostikon Agonon Podosfairou EG (OPAP), C-444/02, [2004] ECR I-105449; Fixtures Marketing Ltd v Oy Veikkaus Ab (Oy Veikkaus), C-46-02, [2004] ECR I-10365.

In the BHB case, the facts are as follows: The BHB is the maker of a broad and constantly updated database relating to horseracing information whose maintenance costs approximately 4 million pounds annually. Since February 2000 the defendant, off-track bookmaking company William Hill, had activated a series of betting services through its website with racing information acquired through a third party, a licensee of the BHB database.

The amount of data used at any time by the defendant appeared to be limited; nonetheless, the BHB sued William Hill for infringing its database right, either through the extraction and reutilization of substantial parts of the database or, alternatively, through the repeated and systematic extraction and reutilization of insubstantial parts.

In the other three cases, organizers of football fixtures set agreements with Fixtures Marketing Limited ('Fixtures') for the exploitation of their lists outside the UK. Fixtures then accused betting companies in Greece, Sweden and Finland of infringing its exclusive rights on the lists because of having re-used, in any week, about a quarter of the data referring to fixtures of the Premier League and other divisions.

2.2.3.1.2 The distinction between obtained and created data and the spin-off theory

Article 7 of the Directive rewards with an exclusive *sui generis* right database makers who demonstrate that a quantitatively or qualitatively substantial investment was made in 'obtaining, verifying or presenting' the contents of a database. The ECJ adopted the view of the defendants and decided to embrace a narrow interpretation of the Directive's term 'obtaining', by excluding the costs incurred in the creation of new data (such as generating fixtures lists) from being considered relevant to satisfy the requirement of the substantial investment. Paragraph 31 of the BHB decision reads as follows:

[t]he expression 'investment in...the obtaining...of the contents of a database must, as William Hill and the Belgian, German and Portuguese Governments point out, be understood to refer to the resources used to seek out existing independent materials and collect them in the database, and not to the resources used for the creation as such of independent materials. 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.

The Court therefore agreed with the principles underlying the so-called 'spin-off doctrine' that was particularly popular among Dutch courts and authors.²⁷ According to the spin-off theory, which finds its premises on the 'incentive' rational²⁸ of the *sui generis* right, this protection can only be attributed against investments that are directly connected to the production of the database.

Thus, investments in the obtaining phase must be intended as referring exclusively to the resources invested in the collection of already existing materials and in their incorporation in the database. In the case at issue, the Court clarified that the costs incurred by the database makers can be merely ascribed as investments in the creation of the fixture lists, since such data sets substantially emerge from the very organization of the fixtures (e.g. the selection of the horses participating in the races and the previous

²⁷ On the Dutch 'spin-off theory', see DJG Visser, *The Database Right and the spin-off theory*, in Snijders and Weatherill (eds), Ecommerce Law, Kluwer Law International, 2003, pp 105-110; E Derclaye, *Database sui generis right: should we adopt the spin-off theory?*, EIPR, 2004, pp 402-412; A Beunen (2007), pp 105-125.

²⁸ As stressed by Hugenholtz-Davison (p 4), recitals 10 to 12 preceding the Database Directive explain that the main rationale for introducing the *sui generis* right was to promote the development of the European database industry; thus, accordingly, 'in the light of this incentive there would appear to be no reason to grant protection to data compilations that are generated quasi 'automatically' as by products of other activities'.

controls related to their selections).²⁹ Additionally, the Court rejected the argument that verification during the process of creating contents that are subsequently included in a database could represent a relevant substantial investment: '[...] such prior checks are made at the stage of creating the list for the race in question. They thus constitute investment in the creation of data and not in the verification of the contents of the database'.³⁰ In deploying its arguments regarding the substantiality of the investment, the ECJ also referred to recital 39 – according to which the goal of the *sni generis* right is to safeguard the financial and professional investments made by database makers in obtaining and collecting their contents – and to recital 19, which contains the only indication of the Directive regarding the required level of investment by stating that the compilation of several recordings of music performances on a CD is excluded from the scope of both copyright and *sni generis* protection.³¹ Analogously, the Court derived that the mere creation of materials incorporated in a database cannot be considered compliant with the required investment in the obtaining of the contents of such database.

2.2.3.2 Exclusive rights of extraction and reutilization and infringement

2.2.3.2.1 The rights

The *sui generis* right provides the maker of a database with two rights that can be the object of transfer, assignment or license: the first against the extraction and the second against the re-utilization of substantial parts of the database.

Paragraph 2 of article 7 defines the right of extraction and re-utilization as follows: '(a) 'extraction' shall mean 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; (b) 're-utilization' shall mean 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'. With regard to re-utilization it further specifies: 'The first sale of a copy of a database within the Community by the right-holder or with his consent shall exhaust the right to control resale of that copy within the Community. Public lending is not an act of extraction and reutilization.'

Defining the scope of such rights has not been an easy task for national and European courts, especially in the context of a rapidly changing digital environment, even if they can be compared to the

²⁹ Paragraph 38 of the BHB decision reads: '[...] Investment in the selection, for the purpose of organizing horse racing, of the horses admitted to the run in the race concerned relates to the creation of the data which make up the lists for those races which appear in the BHB database. It does not constitute investment in obtaining the contents of the database. It cannot, therefore, be taken into account in assessing whether the investment in the creation of the database was substantial.' Coherently, the Court keeps the same line in the Oy Veikkaus Ab decision: 'The preparation of those fixture lists requires a number of factors to be taken into account such as the need to ensure the alternation of home and away matches, the need to ensure that several clubs from the same town are not playing at home on the same day, the constraints arising in connection with international fixtures, whether other public events are taking place and availability of policing. [...] Such an investment, which relates to the organization as such of the leagues, is linked to the creation of the data contained in the database at issue, in other words those relating to each match in the various leagues. It cannot, therefore, be taken into account under art 7.1 of the Directive', para 10-42 of the Oy Veikkaus Ab decision.

³⁰ Para 40 of the BHB decision.
³¹ Beunen (p 138) argues that this recital was mainly intended to avoid an accumulation of the *sui generis* right with the neighbouring right which is already enjoyed by a producer on its phonograms and CDs; furthermore, the indication given by recital 19 cannot always be interpreted as a rule. According to Derclaye (p 75), although recital 19 could be deemed to be cancelled by recital 17, it is still questionable whether it can offer guidance on the level of the substantial investment. In fact, it just gives an example of an insubstantial investment without setting up a higher threshold that could be considered compliant with the substantiality requirement.

economic rights existing in copyright law.³² The extraction right appears to correspond to the copyright's reproduction right, while the reutilization right comes into view as parallel to the right of distribution and communication to the public.

Fortunately, the ECJ dealt with the notion of extraction and re-utilization in all its rulings concerning the interpretation of the Database Directive's provisions, thus providing useful orientation on the scope of these rights (particularly on the former).

2.2.3.2.2 The infringement test

Article 7.1 sets forth that an infringement of the *sui generis* right takes place when there is 'an extraction and/or re-utilization of the whole or of a substantial part, evaluated qualitatively and/or quantitatively, of the contents of the database'. The second part of the infringement test is contained in article 7.5, which reads as follows: 'The repeated and systematic extraction and/or reutilization of insubstantial parts of the contents of the database implying acts which conflict with a normal exploitation of that database or which unreasonably prejudice the legitimate interests of the maker of the database shall not be permitted'.

Thus, article 7.5 – as it was clarified by the ECJ in the BHB and Football Fixtures decisions – acts as a safeguard clause, aimed at preventing the circumvention of article 7.1. In other words, this provision prohibits the repeated and systematic use of an insubstantial part that could result in the infringement of the *sui generis* right on a substantial part, so causing prejudice to the legitimate interest of the database's maker,³³ the latter being defined by recital 41 as the person who takes the initiative and the risk of investing.

The Directive does not define the terms 'substantial part' and 'insubstantial part', nor the terms 'quantitative' or 'qualitative'. Considering this, courts and commentators welcomed the definitions of such notions provided by the ECJ in 2004. As will be illustrated in the next paragraphs, the Court also made more explicit the link between the substantial investment and the infringement test, thus stressing the point that an infringement will take place only if the substantial investment is effectively undermined by the user through unlawful extraction and/or re-utilization.

2.2.3.2.3 The correlation between investment and infringement

Article 7.1 states that an infringement of the *sui generis* right takes place when there is an 'extraction and/or reutilization of the whole or of a substantial part, evaluated qualitatively and/or quantitatively, of the contents of that database'. As stressed by Derclaye,³⁴ the Directive appears to build up the correlation between the protection requirement and the infringement in three different ways. First, the term 'substantial' qualifies both the investment and the part of the database which is used. Secondly, both the substantial investment and the substantial part can be evaluated qualitatively or quantitatively. Thirdly, article 7.1 makes reference to the same object – namely the contents of the database – in two different points: at the beginning, the provision refers to a substantial investment in the obtaining,

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³² However, the exclusion of public lending from the scope of the *sui generis* right in art 7 (2) represents a divergence from copyright regime. See Derclaye (2008), p 108.

³³ As pointed out by Beunen, the end of this provision meets the last two conditions of the three-step test in art 9.2 of the Berne Convention and art 13 TRIPS Agreement that apply to copyright exceptions. Beunen (2007), pp 201-207.

³⁴ Derclaye (2008), p 109.

verification or presentation of the contents of the database; and in the final part, it refers to a substantial part of the contents.

The Directive does not provide any definition of the terms 'substantial'/insubstantial' or 'qualitative'/'quantitative'. The ECJ seems to be aware of this lack of useful criteria and addresses the question by offering guidance on the four definitions.

Intuitively, the first method to assess the substantiality of the part extracted and/or re-utilized consists in comparing quantitatively the amount of data taken with the total amount of data contained in the database as a whole. Accordingly, the ECJ decides that a quantitatively substantial part corresponds to 'the volume of data extracted and/or reutilized and must be assessed in relation to the volume of the contents of the whole of that database'. Furthermore, the Court observes that 'if a user extracts and/or reutilizes a quantitatively significant part of the contents of a database whose creation required the deployment of substantial resources, the investment in the extracted or re-utilized part is, proportionately, equally substantial'. Consequently, in the context of the BHB case, the materials reutilized by the defendant were not evaluated as quantitatively substantial, since they amounted to a small proportion of the whole database.

On the other hand, 'the expression "substantial part, evaluated qualitatively" of the contents of a database refers to the scale of the investment in the obtaining, verification, presentation of the contents of the act of extraction and/or re-utilization, regardless of whether that subject represents a quantitatively substantial part of the general contents of the protected database'. The Court further considers that 'a quantitatively negligible part of the contents of a database may in fact represent, in term of obtaining, verification or presentation, significant human, technical or financial investment';36 thus it must be evaluated whether the human, technical and financial efforts37 put in by the database maker in obtaining, verifying or presenting such data represent a substantial investment.38

It has been argued that the substantiality of a part can also emerge from its economic value, namely from the price that would be paid for such a part, which would raise proportionately with the rate of investments incurred in the obtaining, verification and/or presentation of the part's contents. But such a direct correlation cannot always be traced, and the Directive recognizes a *sui generis* protection on the basis of the investment made in the database's production rather than in its economic value.

Accordingly, and significantly, the ECJ refuses the argument that since the data taken by William Hill are of crucial economic importance and vital to the organization of the horse races for which BHB is responsible, this would be evidence of the fact that the data amounted to a substantial part of the contents of the BHB database.³⁹

³⁵ Para 70 of the BHB decision.

³⁶ Para 71 of the BHB decision.

³⁷ Beunen gives the example of a database made with data obtained through highly skilled but unpaid workers (such as, for instance, academic volunteers). Despite the low financial expenses faced in obtaining this data, their quality is nevertheless high because of the efforts, time and energy dedicated to collect them. See p 192.

³⁸ Para 76 of the BHB decision.

³⁹ The orientation of the ECJ thus differs significantly from the approach of other judicial opinions that had awarded *sui generis* protection to a database on the ground that the extracted information – even if minimal in the amount – was assessed to be of significant economic value to the defendant. Such an approach was followed, among others, in the Dutch decision of *NVM v De Telegraaf*, where the judge decided that ten data out of a database of 45,000 items regarding property for sale represented a substantial part – qualitatively assessed – because of the great significance of these data for potential buyers (President District Court of The Hague, 12 September 2000, *NVM v De Telegraaf*). Similarly, in the BHB case, the court of first instance in 2001 stated that the racing information used by William Hill constituted the core of the BHB database and that the significance of such data for the alleged infringer was an important parameter to assess whether the part taken and

The second part of the infringement test is contained in article 7.5, which reads as follows: 'The repeated and systematic extraction and/or reutilization of insubstantial parts of the contents of the database implying acts which conflict with a normal exploitation of that database or which unreasonably prejudice the legitimate interest of the maker of the database shall not be permitted'.

The Court answers the question whether William Hill has breached such provision – because of having repeatedly and systematically used insubstantial parts of the BHB database – by clarifying the meaning of article 7.5, the purpose of which, according to the Court, is to prevent the circumvention of article 7.1 of the Directive. Article 7.5 thus prohibits repeated and systematic acts of extraction and reutilization of insubstantial parts of the contents of the database, through which a user could be able to reconstitute the whole or a substantial part of the database, regardless of his specific aim.⁴⁰

The ECJ also rejects the argument of William Hill according to which – since the data were acquired through a third party and not *directly* from the BHB database – no infringement of the plaintiff's *sui generis* right took place. With regard to this point, the Court remarks that 'the concept of extraction and re-utilization cannot be exhaustively defined as instances of extraction and re-utilization directly from the original database at the risk of leaving the maker of the database without protection';⁴¹ therefore, the copying of a substantial part of an original database from a third party may undoubtedly amount to infringement.⁴²

2.2.3.3 Further guidance from the ECJ on the Directive's key terms: extraction, qualitative/quantitative character of the substantial investment

The concepts of extraction and quantitative/qualitative substantial parts are further examined and clarified by the ECJ in two other database cases: the first judgment was issued on 9 October 2008 in *Directmedia Publishing Gmbh v Albert-Ludwigs Universität Freiburg* (Case C-304/07 – the 'Directmedia case') and the other on 5 March 2009 in *Apis – Hristovich EOOD v Lakorda AD* (Case 545/07 – the 'Apis case'). ⁴³

2.2.3.3.1 The Directmedia case

The Directmedia case concerns a database compiled by the Albert-Ludwigs University of Freiburg, based on a list of verses written between 1730 and 1900, drawn up by Professor Knoop, and subsequently published on the Internet. Directmedia Publishing Gmbh ('Directmedia') markets a CD-ROM containing a list of 1000 poems from the same period, 856 of which also appear in the

re-used is significant in the context of the whole database (High Court of Justice of England and Wales, 9 February 2001, para 51).

⁴⁰ Para 86-87 of the BHB decision.

⁴¹ Para 52 of the BHB decision; see also para 53.

⁴² The Court further considers at paragraph 54 that the protection of the *sui generis* right concerns only acts of extraction and reutilization as defined in art 7.2, so that such protection is not extended to the consultation of a database (a term that is new to the text of the Directive). According to Davison-Hugenholtz (2005, p 11), since consultation of an electronic database involves temporary reproduction of part of the content of the database, the reason why the ECJ allows consultation does not appear immediately clear. Therefore, the most adequate interpretation of this paragraph of the judgment seems to be the following: once the database has been made available to the public, the viewing and the temporary copies made for this purpose by any person must be allowed by the database maker.

⁴³ An analysis of the Directmedia and Apis cases was published in the April-May 2009 edition of Society for Computers at Law

university's list. Directmedia, accused of having infringed both the copyright of Professor Knoop and the *sui generis* right of the university as a maker of the database, argues that it only used the university's list as a reference, omitting certain poems, adding others and taking the actual text of the poems from its own digital resources.

The resolution of the dispute depends on the interpretation to be given to the concept of extraction and on the question whether to support a narrow interpretation of that concept, where

such right permits the maker of a database to prevent the physical transfer of all or part of that database to another medium, but not the use of that database as a source of consultation, information and critical enquiry, even if by that process substantial parts of the database in question would be gradually recopied and incorporated in a different database.⁴⁴

According to the Court, the key criterion is to be found in the existence of an act of 'transfer' of all or part of the contents of the database concerned to another medium, whether of the same or of a different nature. Such a transfer implies that all or part of the contents of a database are to be found in a medium other than the original database.⁴⁵

In the view of the ECJ, it is immaterial whether the transfer is based on a technical process of copying the contents of a protected database or on a simple manual process; similarly, it has to be considered irrelevant that the transfer of the contents of the database may lead to an arrangement of the elements that is different from that in the original one.

The Directmedia decision ends with the statement that the transfer of material from a protected database to another database following an on-screen consultation of the first database and an individual assessment of the material contained in that first database is capable of constituting an extraction

to the extent that – and it is left to the referring court to assess – the operation amounts to the transfer of a substantial part, evaluated quantitatively or qualitatively, of the contents of the protected database, or to transfers of insubstantial parts which, by their repeated and systematic nature, would have resulted in the reconstruction of a substantial part of those contents. 46

2.2.3.3.2 The Apis case

The Apis case concerned a claim for infringement brought before the Sofia City Court by Apis (a company specialized in marketing electronic databases for official legal data) for the allegedly unlawful extraction and re-utilization by its competitor Lakorda of substantial part of its modules 'Apis pravo' ('Apis law') and 'Apis praktika' ('Apis case law'). Apis claimed that persons who previously worked in its software department before founding Lakorda unlawfully extracted substantial parts of its modules, so that the new company was soon able to produce and market its own modules that form part of the general legal information system 'Lakorda legis'.

Lakorda denied infringement, contending that its system is the fruit of an independent substantial investment and that its modules have a fundamentally different structure from those of Apis.

⁴⁴ The question referred to the ECJ by the Bundesgerichtshof is the following: 'Can the transfer of data from a database protected in accordance with art. 7.1 and their incorporation in a different database constitute an extraction within the meaning of art. 7.2(a) of that directive even in the case where that transfer follows individual assessments resulting from consultation of the database, or does extraction within the meaning of that provision presuppose the (physical) copying of data?' See para 19-20 of the Directmedia decision.

⁴⁵ Para 36 of the Directmedia decision.

⁴⁶ Final paragraph of the Directmedia decision.

⁴⁷ See the analysis of the Apis decision published on Society for Computers and Law, March 2009, available at the following link: http://www.scl.org/site.aspx?i=ne11157>.

Furthermore, Lakorda argued that in setting up its projects it used publicly accessible sources, such as the Official Journal of the Republic of Bulgaria and the official websites of national institutions, which could justify the great similarity of the contents of its modules with those of Apis.

The questions referred to the ECJ by the Sofia City Court can be gathered in two main groups: the first one relating to the concept of extraction and the second one concerning the concept of substantial part, evaluated quantitatively or qualitatively, of the contents of a database.

The Court reasserted what it had already stated in the BHB and Directmedia cases, namely that the concept of extraction must be given a broad interpretation as referring to any unauthorized act of appropriation of the whole or a part of the contents of the database, with the nature and form of the process used and the aims pursued being irrelevant. The ECJ clarified the distinction between 'permanent' and 'temporary' transfer, which may be relevant for assessing the damages. The Court ruled that there is permanent transfer 'when those materials are stored in a permanent manner on a medium other than the original medium, whereas the transfer is temporary if the materials are stored for a limited period on another medium, such as the operating memory of a computer'.⁴⁸ As to the evidence of extraction, it was noted that if the physical and technical characteristics present in the contents of a database also appear in another database, this may indicate the existence of a transfer between the two databases (thus, an extraction), unless the coincidence can be explained by other factors.⁴⁹

With reference to the quantitative evaluation of a substantial part, the Court held that where there is a body of materials composed of separated modules, the volume of the materials allegedly extracted and/or re-utilized from one of those modules must be compared with the total contents of that module, once it has been verified that the module is entitled to the *sui generis* protection.⁵⁰ Otherwise, the comparison must be made between the volume of the materials allegedly extracted and/or re-utilized from the various modules of that database and its total contents.

With regard to the question relating to the concept of qualitative substantial investment, the Court – also recalling paragraphs 34 and 38 of the Fixtures Marketing decision – ruled that the fact that the materials allegedly extracted and/or re-utilized were obtained by sources not accessible to the public may affect the evaluation of those materials as a substantial part, evaluated qualitatively, depending on the level of human, technical and/or financial resources deployed in collecting such materials.

Another matter addressed to the ECJ is that much of the Apis database was constituted by official and publicly accessible materials. As to this question, the Court ruled that this circumstance does not exclude that the collection in question qualifies as a database;⁵¹ nor does it relieve the national court of an obligation to verify whether the materials allegedly extracted and/or reutilized constitute a substantial part of the contents of the database, either quantitatively or qualitatively evaluated.

2.2.3.4 Rights and obligations of lawful users

⁴⁸ Para 44 of the Apis decision.

⁴⁹ As for materials obtained by the maker of a database from sources not available to the public, the Court observed that, despite representing a circumstantial evidence of extraction, the presence of such materials is not sufficient in itself to prove that a transfer occurred. See para 52 of the Apis decision.

⁵⁰ Para 62-63 of the Apis decision. The ECJ also refers to paragraphs 19 to 32 of the BHB decision.

⁵¹ The ECJ again makes reference to its past ruling on the Fixtures Marketing case; see para 32 to 38.

Article 8 introduces three binding provisions that, according to article 15, cannot be overridden by contract and that exclusively apply to databases which have been made available to the public.

Article 8.1 states that the holder of the *sui generis* right may not prevent a lawful user to take insubstantial parts of the database, assessed either qualitatively or quantitatively, for any purpose, as long as a substantial part of the database is not reconstituted; furthermore, the database maker has the right to authorize the use of only a part of the database.

Paragraph 2, which must be read in connection with 8.1 – and in the light of the ECJ interpretation of article 7.5 – provides that a lawful user may not perform acts conflicting with a normal exploitation of the database or unreasonably prejudice the legitimate interests of its maker. In other words, if the use of a whole database or of a substantial part thereof presupposes a prejudice of the producer's investment, a harm test is explicitly required by the Directive when it comes to articles 7.5 and 8.2. The database maker, thus, has to give evidence of the prejudice suffered as a consequence of the repeated and systematic taking of insubstantial parts. Given this requirement, commentators read article 8.2 as a safeguard clause to prohibit all acts by lawful users which could harm the interests of the producer of a database that has been made available. By forbidding 'acts which conflict with a normal exploitation of the database or unreasonably prejudice the interest of the producer', both article 7.5 and article 8.2 contain a 'two-step test', which entirely corresponds to the last two conditions of the three-step test in article 9.2 of the Berne Convention.

Article 8.3 states that a lawful user of a database may not, in the use of an element of the database protected by copyright or related right, prejudice the holder of a copyright or related right; thus, this provision seems to act as a reminder of the mandatory character of the copyright law principles.

2.2.3.5 Exceptions

Article 9 introduces three exceptions to the *sui generis* right that can only be invoked by a lawful user⁵² and that are clearly modelled on the copyright exceptions provided for in article 6.2. The first two exceptions regard the mere extraction of a substantial part of the contents of a database which has been made available to the public, while the third one concerns both the extraction and reutilization right. Similarly to the copyright exceptions, the three letters of article 9 concern, respectively, private use of non-electronic databases, illustration for non-commercial teaching or scientific research (as long as the source is indicated) and purposes of public security or administrative or judicial procedures.

The drafting of article 9 has been strongly criticized for being too narrow in scope, since the three provided exceptions appear significantly more limited than those for copyright: in particular, article 9(a)

⁵² The Directive does not provide a definition of the 'lawful user'. According to Beunen (p 213), Recital 34 seems to suggest a strict interpretation of the term, where the use can be lawful only if the user entered into a license with the right-holder. The recital states as follows: '(...) once the rightholder has chosen to make available a copy of the database to a user, whether by an on-line service or by other means of distribution, that lawful user must be able to access and use the database for the purposes and in the way set out in the agreement with the rightholder, even if such access and use necessitate performance of otherwise restricted acts'. Not every national transposition of the Directive has adopted the term 'lawful user' in the same provisions in which it can be found in the Directive; moreover, often the term is defined differently. Hugenholtz agrees with the French equivalent to art 8.1, which requires a person to have legal access to a database, since in his opinion lawful use should be intended either as a use permitted by contract or as a legal exception. PB Hugenholtz, *Implementing the Database Directive*, in JJ Kabel, G Mom (eds), *Intellectual Property and Information Law*, Den Haag, Kluwer Law International, 1998, pp 183-200.

applies only to non-electronic databases and only allows for extraction. The exception set forth in article 9(b) is also reduced in its scope: analogously to the previous one, it is restricted to extraction, which makes this provision nearly void since reutilization (in the form of communication to the public) appears to be an essential element in teaching and researching activities.⁵³ Furthermore, the requisite of non-commercial purposes excludes private companies from the scope of this exception, while remaining also extremely complex to regulate the situation of educational institutions, especially if they present a mixed commercial and non-commercial destination.

Another reason why these exceptions are considered to be too few and narrow in scope is that they have an optional nature, with the direct consequence that the situation of lawful users across Europe appears to be quite disharmonized since the number and scope of implemented exceptions can differ significantly throughout the Member States.⁵⁴

In conclusion, many argue that databases enjoy over-protection in Europe, especially when compared to copyright protection which requires a much higher level of creativity and intellectual commitment. In fact, the Directive does not provide for any of the exceptions that can be met in most copyright acts: i.e. fair dealing for news reporting or criticism or exceptions in the interest of handicapped people and in the benefit of libraries and archives. ⁵⁵

Although the exceptions to the *sui generis* right are considered to be exhaustive, some Member States have introduced new ones. Of particular interest in the perspective of our study is article 8 of the Dutch Database Act (this will be the object of further attention in the following chapters), stating that a public authority cannot benefit from the *sui generis* right with respect to databases of which it is the producer, and that contain laws, legal and administrative decisions.⁵⁶ Concerning the other databases produced by a public authority, according to article 8.2 of the Dutch Database Act the *sui generis* right will only apply if this right is expressly reserved, either in general by law, order or resolution or in a particular case as evidenced by a notification in the database itself or when the database is made available to the public.

Such a reservation rule clearly resembles article 15(b) of the Dutch Copyright Act, providing that the reproduction or the making available of works that were made by a public authority is not infringing copyright, unless this right is expressly reserved.⁵⁷

Another exception regarding access to legal databases made by public authorities was adopted by France through a 2002 decree, which imposes a legal duty on the government to produce databases containing (inter)national legislation and case law and to license such databases on the Internet against distribution costs.⁵⁸

⁵⁴ For instance, the implementation in France and in the United Kingdom diverged: France implemented all the three exceptions, while the UK did not implement art 9(a) but did implement artt 9 (b) and 9(c). See Derclaye (2007), pp 134-136. ⁵⁵ Davison (2006) p 170.

⁵³ Derclaye (2007), pp 131-133.

⁵⁶ For a comprehensive analysis of the exceptions applying to public information in the Netherlands, see M Van Eechoud, B Van der Wal, *Creative Commons Licensing for Public Sector Information. Opportunities and pitfalls*, 2008, pp 16-18, available at http://www.ivir.nl/publications/eechoud/CC PublicSectorInformation report v3.pdf>.

⁵⁷ Coherently, according to art 11 of the Dutch Copyright Act, no copyright subsists in law, decrees or ordinances issued by public authorities, or in judicial or administrative decisions.

⁵⁸ Décret no. 2002-1064 du 7 août 2002 relatif au service public de la diffusion du droit par l'internet, *Journal Officiel de la République française* 2002, no. 185 du 9 août 2002, p 13655; online at http://www.legifrance.gouv.fr. For further considerations on this French initiative, see E Derclaye, *Does the Directive on the Re-use of Public Sector Information affect the State's database sui generis right?*, in J Gaster, E Schweighofer & P Sint, *Knowledge Rights – Legal, societal and related technological aspects*, Austrian Computer Society, 2008, p 165.

2.2.3.6 Term of protection

Article 10 of the Directive provides that the term of protection guaranteed by the *sui generis* right amounts to 15 years, starting from the first of January of the year following the date on which the database was completed. According to article 9.2, if the database is made available to the public before the expiration of the 15-year term, then that term will expire 15 years from the first of January of the year following the date when the database was first made available to the public.

Paragraph 3 of article 10 provides that the term of protection for a database may start anew under two conditions, both dealing with the notion of the term 'substantial'. The first one is represented by a substantial modification of the contents of the database, evaluated either qualitatively or quantitatively, which can consist in additions, deletions or alterations (including rearrangement of the contents).

Secondly, this substantial modification must represent a substantial investment, evaluated qualitatively or quantitatively. According to recital 55, 'a substantial new investment involving a new term of protection may include a substantial verification of the contents of the database'. Combining both requirements, it can thus be inferred that a new term will not be triggered by a small (non-substantial) modification, even if the investment can be qualified as substantial; on the other hand, if the substantiality of the change does not result in a substantial investment, no new term will be guaranteed.

Article 10.3 is pointed out as one of the most controversial and criticized provisions of the whole Directive since apparently it offers grounds for a perpetual protection of the databases. The clause appears to be ambiguously drafted, because it is unclear if the renewal of the term applies only to the substantially renovated part – resulting from a substantial investment – or to the whole database, thus perpetually protecting the 'older' elements of the original database, which should have been otherwise available in the public domain for a wider use after 15 years.⁵⁹

The criticism regarding the prolongation of the protection seems to be well-grounded, particularly with reference to the status of the 'dynamic databases', namely the databases that are constantly updated. In fact, the Directive does not address the question whether a dynamic database should be considered a different database each time, thus benefiting from its own new term of protection. Derclaye illustrates two interpretations concerning the case of a database updated every day. ⁶⁰ If the double requirement of a substantial change resulting in a substantial investment finds application to the new part of database, then the updated part is unlikely to gain protection since neither the change nor the investments satisfies the condition of substantiality. This could result in an inefficient and objectionable situation, where the database producers do not make their databases available until they are sure they can enjoy secure protection. Alternatively, if we consider the same dynamic database as one single database, by the time the term of protection expires on the initial data, the changes and the investment will undoubtedly comply with the requirement of substantiality, so that while the older data will fall into the public domain, the new elements will be protected. Such a solution, which is not provided for in the

⁵⁹ This possible perpetual protection is over protective since the investment must in theory have already been recouped for the data which are older than 15 years. Every intellectual property right has a limited duration. The term gives the incentive to create or innovate and, once the investment is recouped, at the end of the term, the creation or invention falls into the public domain. First, a new protection of "old elements" does not promote further investments but rewards the creator or inventor over and above its original investment and grants her an unjustified monopoly. It is unjustified because it has already been rewarded. Secondly, after a while, creations and inventions must be available to the wider public for widespread use in order to promote progress. If the investment is recouped after 15 years, extractions and re-utilizations do not harm it' Derclaye (2008), p 141.

⁶⁰ Derclaye (2008), p 143.

Directive, would at least represent a balanced reading of the Directive's provisions, in order to remedy the most explicit aspects of overprotection of the *sui generis* right. Moreover, it could avoid the creation of unjustified monopolies by allowing access to informative elements whose production has already been adequately rewarded in terms of IP law criteria. On the other hand, it should also be observed that in practice it can be very difficult to isolate the 'old' elements, free for use, from the 'new' elements, which are protected.

2.2.3.7 Beneficiaries of the protection

As to the beneficiaries of the *sui generis* protection, article 11 sets forth that natural persons who are nationals of a Member State or who have their habitual residence in the territory of the EU can benefit from the database right. Furthermore, companies and firms are also entitled to such protection if they are formed according to the law of a Member State and have their registered office, central administration or principal place of business within the EU. Article 11.2 clarifies that in case a company or a firm has a registered office only in the territory of the EU, its operations must be substantially and durably linked with the economy of a Member State.

Paragraph 3 contains a 'reciprocity clause' concerning databases produced outside of the EU. In order to enjoy the *sui generis* right, third countries must conclude a reciprocity agreement with the European Council – following a proposal by the Commission – through which they offer EU producers a protection equivalent to the one provided for in the Directive.

Nevertheless, it has been argued that, despite this rule, it may be quite simple for non-European database producers to bypass the reciprocity clause, either by establishing a subsidiary company in the EU or entering into a collaboration agreement with an EU firm for the development of a database, so that they can jointly enjoy the *sui generis* right.

2.2.3.8 Unanswered questions and future ECI decisions

Of course, despite the useful criteria enunciated by the ECJ in the context of the above-mentioned decisions, many questions regarding the scope and nature of the *sui generis* right remain unanswered. First, while the ECJ presents the distinction between obtaining and creating information as a quite linear criterion, the application of this distinction is often complicated to put into practice. This is particularly evident when dealing with scientific data, such as meteorological data or genetic sequences, which are not easily ascribable to one of these two categories. Moreover, the ECJ decisions do not deal with the problem of the strategies that database makers are likely to devise for getting around the ECJ's obtaining/creating distinction. Obviously, producers of collections of created data may still qualify for protection on the ground that a substantial investment was made in verifying or presenting that information; additionally, the same producers could sell a large amount of created data for a large

⁶¹ On the database right's potential for abuse, see PB Hugenholtz, *Abuse of Database Right: Sole Source Information Banks under the EU Database Directive*, in F Leveque, H Shelanski, *Antitrust, Patents and Copyright. EU and US Perspectives*, Cheltenham: Edward Elgar, 2005, pp 203-219.

⁶² See M Davison, PB Hugenholtz (2005), p 115.

amount of money to a sister company, so that the latter can satisfy the requirement of a substantial investment in the obtaining of pre-existing data.

Nevertheless, further guidance is likely to be given by the Court in the near future regarding new aspects of the Database Directive's key provisions.

In fact, a new series of questions regarding the interpretation of the Database Directive has just been forwarded to the ECJ by the Court of Appeal of England and Wales.⁶³ In this case, concerning once again the use of football fixtures data, the Court of Appeal asked the ECJ to clarify whether 'emission theory' or 'transmission theory' applies - in other words, whether online publishing occurs in the country where the information is hosted or where it is received. The claimants between them say they own a UK copyright and database right in a database called Football Live, a compilation of data about football matches in progress. The defendants provide live scores, results and other statistics relating to football and other sports, in particular to customers who offer betting services for the UK market. The claimants argue that the defendants are getting their data not by the exercise of independent compilation but by taking it from Football Live. On the other hand, the defendants deny copying, saying that they generate the data independently.⁶⁴ They admit their activities are carried out abroad, in Germany, Austria (where the server is located) and in the Netherlands (the place of the back-up server), but they maintain that no infringement of UK database right in Football Live has taken place since Internet publishing represents a transmission involving both the sending and the receipt of information. Conversely, according to the claimants, the BHB, Directmedia and Apis cases all show that the concept of extraction is wide and not confined to direct extraction; thus, the defendants should be regarded as 'extracting' not only in Austria and Germany but also in the UK.

Thus, the Court of Appeal deemed it necessary to raise the following questions to be decided by the ECJ:

Where a party uploads data from a database protected by the sui generis right under Directive 96/9/EC 9 ('the Database Directive') onto that party's webserver located in member state A and in response to requests from a user in another member state B the webserver sends such data to the user's computer so that the data is stored in the memory of that computer and displayed on its screen:

- a) Is the act of sending the data an act of 'extraction' or 're-utilisation' by that party?
- b) Does any act of extraction and/or re-utilisation by that party occur
 - i) in A only;
 - ii) in B only; or
 - iii) in both A and B?65

The ECJ is expected to deliver its preliminary ruling towards the end of 2012.

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⁶³ Court of Appeal of England and Wales [29-03-2011] EWCA Civ. 330. Case No: A3/2010/2849 and 2947 – Football Dataco Ltd and Others v Sportradar Gmbh & Anor ('Dataco decision').

⁶⁴ The claimants say that the infringement can be proved by *telltales*: from time to time an error of Football Live has appeared on Sport Live Data (the defendants' database) and this could only have happened by copying. On the other hand, the defendants say that *telltales* are explicable, since for instance the error could come from a common source such as an incorrect goal attribution announced on the ground. See para 7 of the *Dataco* decision.

⁶⁵ Para 47 of the *Dataco* Court of Appeal decision.

2.4 DATABASE RIGHT AND GOVERNMENT DATA

2.4.1 SUI GENERIS RIGHT AND GOVERNMENT DATA: APPLYING THE ECJ CRITERIA

What if we try to apply the criteria expressed by the ECJ in the context of the 2004 rulings to databases produced by the State and its branches in the context of an institutional activity?

Let us focus on the case of public bodies such as a ministry of transportation or a department of public health. Such administrative entities will certainly produce and collect, in connection with the performance of their respective institutional missions, enormous amounts of data, which appear to be extremely interesting and can be quite easily aggregated and organized for the production of a database.

Coherently with the rationale of the spin-off theory, only investments directly dedicated to the production of a certain database should qualify as a relevant substantial investment. The production of a database, made by a certain public body from the data collected in connection with the execution of its main institutional mission (as in the examples above), would rather appear as an auxiliary activity in respect of the principal public task at issue. Thus, most likely this database will be a by-product of the main institutional task and, as such, should not be granted any *sui generis* protection, since the most significant costs are related to the management of public transportation or to the supply of health services.

Does it make any difference if the public body at issue is institutionally in charge of collecting and producing information, as is the case of bodies such as statistical offices generating socioeconomic data, company registrars collecting corporate financial data and meteorological agencies producing weather information?

However, as we saw in the previous paragraphs, the ECJ did not adopt in its rulings the spin-off theory as such by making reference to the criteria discussed above; instead, it adopted one of the spin-off theory main arguments as a basis for formulating the distinction between obtaining and creation as such of the data, respectively admitting and excluding the *sui generis* protection. We already mentioned the BHB's and Football Fixtures' paragraph according to which the purpose of the *sui generis* right 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'; ⁶⁶ therefore, in the view of the Court, the concept of investment in the obtaining of the database's contents must be intended as referring 'to the resources used to seek out independent materials and collect them in the database, and not to the resources used for the creation as such of independent materials'.⁶⁷

On the basis of this premise, how does the ECJ's distinction between costs connected to obtained and created data operate with regard to public sector databases? With regard to the cases mentioned above, is that information created anew or collected from existing sources? If we assume that such data are just created, no database right can be considered as subsisting in the collection of data, which will be subject to free extraction and reutilization.

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⁶⁶ See para 31 of the BHB decision.

⁶⁷ Ibidem.

Undoubtedly, it is not easy to draw a line between these two categories of data. This is particularly evident when dealing with data 'recorded' in nature through instrument of measure: Derclaye mentions meteorological, astronomical and genomic data as examples of data that can probably be considered both obtained and created, since they pre-exist in nature and are not created arbitrarily by the human brain. Therefore, we see how categories of data such as geographical or meteorological data, which are among the most attractive categories of government information – in terms of access and re-use – also appear very difficult to qualify according to the ECJ distinction.

However, the Court specified that if a database results from a principal activity and contains created data, this circumstance per se does not preclude the database producer from being granted a *sui generis* protection if the producer proves that either the obtaining, verification or presentation of the materials required a substantial investment in qualitative or quantitative terms that is independent from the resources used to create those materials.⁶⁹ This approach is opposite to the spin-off theory, where Courts denied *sui generis* protection of databases whenever these were by-products of a main activity, without taking into account an investment in obtaining, verifying or presenting these data.⁷⁰

According to the ECJ, the term 'investment in the verification' has to be interpreted in the meaning of the resources necessary for ensuring the reliability of the information contained in that database and for monitoring the accuracy of the materials collected when the database was created and during its operation.⁷¹ The Court specifies that the resources used for verification during the stage of creation of data or of other materials subsequently collected in the database cannot be taken into account to assess whether there was a substantial investment.

In other words, the object of the verification must be data and materials (already) collected when the database was created.

Let's take the example of a public agency such as the Royal Netherlands Meteorological Institute (KNMI), which is the Dutch national institute for weather, climate research and seismology. ⁷² KNMI provides 24-hour-per-day weather forecasts and warnings for the public at large and for the aviation and shipping industries; additionally, it releases high-level research on climate, climate change, earthquakes and related phenomena and geo-information. If we assume that meteorological data are essentially 'recorded' from nature, and that the obtaining of such data is substantially inseparable from their creation (in a way that they result in a substantially created form), what kind of verification activities should then intervene to satisfy the standard for protection?

For short-term weather forecasts, the information collected when the database was created is post-processed through technological instruments that enable the elaboration of such data and the representation of the weather processes. Undoubtedly, mechanisms of verification are involved in this process. But can this technological elaboration of data be read in the sense of the definition provided by the ECJ ('ensuring the reliability of the information contained in the database, to monitor the accuracy of the materials collected when the database was created'), or can it rather be read as a sort of advanced phase of the creation itself?

⁶⁸ Derclaye (2008), p 99. Derclaye reports the position of Charlotte Waelde, who, on the other hand, considers geospatial and geographic data obtained and thus qualified for protection.

⁶⁹ Para 35 of BHB and para 29-30 of Svenska Spel decision.

⁷⁰ Derclaye (2008), p 94.

⁷¹ Para 34 BHB decision.

⁷² < http://www.knmi.nl/index_en.html >.

The application of the ECJ criteria seems easier in regard to the research projects of KNMI, which encompass several domains and result in scientific publication and reports. In this case, the verification requirement is probably more likely to be accomplished, since the expertise of the researchers is specifically focused on the provision of more accurate services and on the development of models and monitoring capabilities. But still, the investment will often be more concentrated on the interpretation of data or on the development of more effective measurement instruments than on the checking of the reliability and accuracy of the data created and registered with technological instruments of measure.

The ECJ defines the resources invested in presenting as 'the resources utilized for 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 organization of their individual accessibility'. Presentation therefore appears mainly connected to the organization of the data and to the accessibility of the materials for the users; commentators suggested that the substantial investment can be satisfied through the provision of indexes, user interfaces and digitization of analogue files. This standard seems to be satisfied when looking at the website of KNMI ('Datacentrum' page). The large amount of datasets made available on the webpage is organized by thematic criteria (weather, climate, seismology, ozone and satellite datasets and many others subcategories, etc.); the information is complemented by a wide array of images and graphics and datasets that can be searched and selected according to chronological criteria. Indexing appears helpful and effective, while the interface is undoubtedly user-friendly.

The website of the Italian Institute of Statistics also provides accessibility to a great amount of databases and materials related to several domains (economy, demography, agriculture, health and education, etc.). To Databases are complemented by meta-information (i.e. methodology, classifications, definitions) and organized by subject, although the interface and the search appears less user-friendly when compared to the example above.

On the other hand, the investment in presentation cannot be considered sufficient when databases are made available without (or with poorly) structured indexing or search mechanisms.

In conclusion, since the *sui generis* protection can be triggered under a number of alternative criteria, public sector databases are relatively likely to satisfy the formal requirements for protection, also in compliance with the principles expressed by the ECJ in the *BHB* and *Football Fixtures* rulings. On the other hand, as stressed by Derclaye, the existence of a substantial investment – based on the criteria discussed above – needs to be proved each time. The difficulty of providing a clear proof before the courts regarding the investment, especially in situations where the reach of the required threshold of investment appears questionable, will often make many of these databases remain unprotected.⁷⁷

Moreover, although the ECJ criteria have the merit of limiting the most evident profiles of overprotection in database production, their practical application is anything but easy and intuitive. This difficulty in clearly determining the level of protection of a certain database is of course detrimental to users and appears to be rather insidious, especially from the perspective of re-using collections of data

⁷³ Para 27 Svenska Spel decision.

⁷⁴ Derclaye (2007), p 98.

⁷⁵ < http://www.knmi.nl/datacentrum/>.

⁷⁶ < http://www.istat.it/en/products/databases >.

⁷⁷ On the difficulty of proving a substantial investment in obtaining, verifying or presenting created data, see Derclaye (2007), p 95.

produced at the public level, which, because of their very nature, are especially useful and interesting for public extraction and reutilization.

2.4.2 THE STATE AS A DATABASE RIGHTHOLDER

As discussed in the previous paragraphs, apparently many public databases meet the formal requirements for the *sui generis* right to accrue; indeed, such protection could be still granted in compliance with the criteria formulated by the ECJ in 2004.

The same issue, namely whether the database right can actually subsist in public sector databases, is now to be analysed from a different and somewhat more substantial perspective, thus shifting the focus from the relevance of the investment made by the public administration to the status of the same public institution as a database producer.

In other words, was the Database Directive really also designed for protecting the investments made by public bodies as database producers within its scope of application, or was it rather intended to reserve such economic incentive to private investors?

In 2007 the German Supreme Court asked the ECJ to give guidance on the scope of application of the Database Directive as to government databases. Unfortunately, the preliminary questions were withdrawn by the Court. The questions – in respect of which an ECJ's ruling could have been particularly interesting for the purpose of this study – were as follows:

- 1. Do Article 7(1) and (5) and Article 9 of Directive 96/9/EC [...] prohibit a legal provision of a Member State, according to which an official database which is published as a matter of general information for official purposes (in this instance: a systematic and complete collection of all call for tender documents emanating from a German Land) does not benefit from sui generis protection under the directive?
- 2. If the answer to (a) is in the negative: is this also the case where the database is constructed not by a public body but by a private undertaking on its behalf, to which all bodies of the Land issuing calls for tender must directly submit their calls for tender documents for publication?⁷⁸

In the absence of an ECJ ruling on this point, the main interpretative reference remains the text of the Database Directive, which does not expressly regulate the issue. Consequently, a state's databases are deemed to be eligible for *sui generis* protection as long as they satisfy the requirements of the right as to the substantiality of the investment. Furthermore, as pointed out by Derclaye, the text of the Directive and its preparatory materials implicitly admit public bodies within the scope of application of the Directive. In fact, whereas article 6.2 provides for the traditional limitations in copyright for databases (that in most states explicitly entail the exclusion of official materials from copyright protection), the Directive does not phrase any similar exceptions for a *sui generis* right, the list of exceptions for the rights of extraction and reutilization being exhaustive.⁷⁹

Another significant hint as to the possibility for public bodies to benefit from the database right can be identified in the deletion of article 8 from the Directive Proposal, which read as follows:

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⁷⁸ Verlag Schawe GmbH v Sächisches Druck – und Verlagshaus AG; OJ 2007, C 155-13.

⁷⁹ E Derclaye, Does the Directive on the Re-use of Public Sector Information affect the State's database sui-generis right?, in J Gaster, E Schweighofer, P Sint (eds), Knowledge Rights – Legal, societal and related technological aspects, Austrian Computer Society, 2008, p 161

- 1. Notwithstanding the right provided for in art. 2.5 to prevent the unauthorized extraction and re-utilization 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 re-utilize, in whole or substantial part, works or materials from that database for commercial purposes, shall be licensed on fair and non-discriminatory terms.
- 2. The right to extract and re-utilize the contents of a database shall also be licensed on fair and non-discriminatory terms if the database is made publicly available by a public body which is either established to assemble or disclose information pursuant to legislation, or is under a general duty to do so.

In conclusion, the wording of the Directive's provisions does not exclude public sector databases from being granted a *sui generis* protection; hence, public bodies are implicitly admitted as right-holders as long as they can prove an investment which is substantial and in compliance with the criteria expressed by the ECJ in its rulings. With regard to this issue, the objections raised by commentators tackle another point, namely the origin of the money invested by public institutions to collect, verify and present the contents of a certain database and the nature of the financial risk undertaken by the same public bodies. As argued by Derclaye, 'since the state makes databases with taxpayer's money, it arguably does not invest; it does not take a financial risk. Databases made by the state cannot therefore be protected by the *sui generis* right'⁸⁰ because actually that investment does not face the basic economic need of being recouped on the market to remain financially sustainable. The same considerations regarding the collective subsidization of the collection of public data were in operation when elaborating the basic principles underlying the PSI Directive (that will be analysed in the next chapter); in particular, it was argued that PSI should be accessible and reusable at zero or marginal costs for citizens since they had already paid for that information to be collected and produced.

However, can we still obtain any useful indication about this issue, if not from the text of the Directive then at least from the national laws implementing the Database Directive? In other words, do the Member States set any distinction between databases produced by a private or a public entity? Is it possible for these categories of rights owners to exercise their rights in the same way?

The only Member State explicitly regulating such legal profiles is the Netherlands. Indeed, as already discussed in par. 2.2.3.5, article 8 of the Dutch Database Act denies a public authority the right to exercise its exclusive database rights unless the right is reserved explicitly in general by law, order or ordinance, or in a specific case by notification on the database itself or while the database is made available to the public. Particularly interesting to our purposes is a 2009 ruling from the Raad van State (Dutch Council of State) involving a private company with limited liability, Landmark Nederland BV, and the Amsterdam City Council, ⁸¹ the latter acting as the appellant against a decision of the Amsterdam City Court. In its decision of 11 February 2008, the Amsterdam District Court invalidated a decision of the Amsterdam City Council through which – claiming a database right – it had imposed an annual license fee and restrictions on the use of its environmental database by Landmark, a company specialized in land and property search information. ⁸² The Council had restricted the purpose for which the information could be used by Landmark, prohibited the transfer of the information to third parties and posed a limit of one year on the license.

81ABRvS 29 April 2009, n 07/786, AMI 2009-6 (College B&W Amsterdam/Landmark; m. nt. M. Van Eechoud).

⁸⁰ Derclaye (2008), p 74.

⁸² In May 2006, on the basis of the Dutch Information Government Act (WOB), Landmark had requested an address list of 12,000 locations in the city of Amsterdam, specifying whether soil contamination surveys had been carried out. The purpose of Landmark was to use this information for its Enviroscan reports about the environmental situation of specific locations. Such data were then to be provided on request to real estate agents.

The question for the highest Dutch administrative court is whether the local authorities of Amsterdam are allowed to pose conditions and restrictions on the re-use of these data. In this connection, article 11a, sub 1a of the Public Administration Act requires two conditions: there has to be a database and the public sector body must be the producer of that database.

The court first stated that the municipality faced a substantial investment in the collection, checking, editing and presentation of the data; thus, the collection of data effectively represents a database according to the Dutch Database Act.

On the other hand, the court ruled that the City Council does not qualify as a 'producer of a database' and therefore does not own any database right in the information it gathered, since the collection of data occurred in the performance of its public task and with the support of governmental subsidies; the database was indeed realized thanks to public funds, partially coming from the Ministry of Housing, Spatial Planning and Environment to map local soil pollution.

In particular, the court referred to recitals 40 and 41 of the Database Directive, according to which the producer of a database is the one who takes the initiative and carries the risk of the investment to obtain, verify and present the contents of the database. Thus, in the view of the court, the City Council does not qualify as a producer of the database because it does not actually bear the risk of the investment since public funding and government subsidies cannot be equated to an investment that needs to be recouped on the market.⁸³

On 29 April 2009, the Raad van State rejected the Amsterdam City Council appeal and confirmed the decision of the District Court in favour of Landmark.

Should this line of reasoning prevail in the future, administrations that preside over databases financed through public funds are most likely to be excluded from being considered database producers and from enjoying the protection connected to the Database Directive's provisions. Supporters of open data principles arguably sympathized with the Landmark case's outcome, considering that the *sui generis* protection of data collected with public money and in the performance of a public task is not a desirable result in light of the principles underlying both the Database Directive and the Public Sector Information Directive,⁸⁴ the latter being founded on the idea that public sector data should be as freely available as possible in order to be re-used for new value-added products and services. Nonetheless, a ruling such as Landmark's – in which we have the object of the database protection (the database itself) but not the right-holder – should not represent an ideal and recommendable solution. In fact, in this case public bodies, as database producers, are treated differently from private investors, but neither the provisions of the Database Directive nor its national implementations (as illustrated above) present any evidence of the willingness of the European legislator to treat these two categories of database makers differently.

⁸⁴ See the following chapter.

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⁸³ The Court also made reference to the ECJ Directmedia decision, in which it was stated that the purpose of the database right is 'to guarantee the person who has taken the initiative and assumed the risk of making a substantial investment in terms of human, technical and/or financial resources in the obtaining, verification or presentation of the contents of a database a return on his investment by protecting him against the unauthorized appropriation of the results of that investment by acts which involve in particular the reconstitution by a user or a competitor of that database or a substantial part of it at a fraction of the cost needed to design it independently'.

Another interesting decision is represented by an ordinance issued by the Court of First Instance of Rome on 5 June 2008. According to the court, public bodies are not entitled to the *sui generis* protection over their databases, based on article 102*bis* of the Italian Copyright Act implementing article 11 of the Database Directive, which expressly mentions as possible database right-holders only private individuals and businesses, but not public administrations. The Tribunal thus offers a restrictive interpretation of this provision by assessing that granting a *sui generis* right to the Italian postal service over a database of postal codes would be overprotective of the postal service interests. As a matter of fact, the constitution of the database occurred when the postal service still had the status of a public body and continued after its privatization, through the use and updating of data that were acquired thanks to a position of quasi-monopoly.

The decision is arguably interesting and could be welcomed for the same reasons discussed above with reference to the Landmark case. On the other hand, the argument sounds weak since, once again, it seems to force a distinction between private and public database makers, with rather questionable results when rooting the analysis on the very provisions of the Database Directive and on its national implementations.

CONCLUSIONS

Although it can be questioned whether the database right, as a tool of economic incentive, is over-protective of the interest of the public bodies – since their investments directed to database production are based on taxpayers' money – we saw that neither the wording of the Database Directive nor its national implementations (with the exception of the Dutch Database Act) treat private and public database producers differently.

Indeed, by applying the criteria expressed by the ECJ to governmental databases, we concluded that, in a significant number of cases, states' databases are able to meet the formal requirements for the *sui generis* right to accrue. On the other hand, many collections of data will arguably remain excluded from protection because the materials constituting the database are merely created – and not obtained from already existing sources – and the threshold of substantial investment is not reached by further investing either in the obtaining, verification or presentation of such contents.

However, the results of a practical application of the ECJ principles are particularly complex regarding the distinction between obtaining and creation and regarding the concrete determination of the investment necessary to trigger the protection.

Such complexity arguably has the potential to adversely affect the re-use opportunities of the collections of public data, given the extreme difficulty – both for public bodies making the database available and for prospective re-users – in determining each time whether a certain database is covered by the *sui generis* right and in which measure re-utilization and extraction can take place freely.

⁸⁵ Court of First Instance of Rome, ordinance of 5 June 2008, *Edizioni Cierre v Poste Italiane*. For a summary of the decision, see http://www.lapsi-project.eu/lapsifiles/Court%20Rome%205-6-2008.pdf>.

3. DIRECTIVE 2003/98/EC AND THE EUROPEAN LEGAL FRAMEWORK FOR THE RE-USE OF PUBLIC SECTOR INFORMATION

INTRODUCTION

Public sector information (PSI), intended as the whole of information collected, produced or paid for by public sector bodies as part of their public task, is the single largest source of information in Europe and appears as a key resource in the context of the information economy.

It ranges from geographical and meteorological information to statistical, legal, financial, economic and other types of data.⁸⁶ The issue of ensuring better access to and wider re-use of PSI has received broad attention in the last decades due to the economic and social benefits that are ensured by the opportunities of analysing, combining and processing governmental data.

Unlocking the potential of PSI by re-using it in innovative ways contributes significantly to economic growth and job creation. Indeed, most of this raw data can be re-used or integrated into new products and services by adding value to it, combining information from different sources, making mash-ups and new applications, both for commercial and non-commercial purposes. A study published in 2011 assesses the value of the European PSI market for 2008 at € 28 billion and points out that the economic benefits derived from further promoting re-use of PSI are around € 40 billion per year. Moreover, the total direct and indirect gains derived from PSI re-use are estimated at around € 140 billion annually.⁸⁷

Furthermore, access to PSI is perceived as a powerful instrument to increase democratic transparency, government accountability and citizens' participation.

In 2003, the EU adopted Directive 2003/98 on the re-use of public sector information (PSI Directive), ⁸⁸ which introduced the basic conditions to facilitate the re-use of PSI throughout the EU. The adoption of the PSI Directive followed that of another important legislative initiative aimed at enhancing access and valorisation of public data, namely Directive 2003/4/EC on access to

The OECD Recommendation on Public Sector Information defines PSI as 'information, including information products and services, generated, collected, processed, preserved, maintained, disseminated, or funded by or for the Government or public institution', taking into account legal requirements and restrictions such as 'intellectual property rights, and trade secrets, effective and secure management of personal information, confidentiality and national security concerns, and fundamental principles including democracy, human rights, freedom of information'. OECD Recommendation of the Council for enhanced access and more effective use of Public Sector Information, [C(2008)36], adopted on 30 April 2008.

87 Vickery, G, Review of recent studies on PSI Re-use and related market developments, Information Economics, Paris, 2011. See also McKinsey Global Institute, Report on 'Big Data, The next frontier for innovation, competition and productivity', May 2011, available

http://www.mckinsey.com/Insights/MGI/Research/Technology and Innovation/Big data The next frontier for innovation>.

⁸⁸ Directive 2003/98/EC of 17 November 2003 on the re-use of public sector information, OJ L 345/90, 31.12.2003.

environmental information,⁸⁹ representing an exception of uniformity in a field – that of access regimes – which is subject to different national policies. Such legislative developments, then, undoubtedly contributed to maturing the European debate in preparation for the INSPIRE Directive of 2007, which established an infrastructure for spatial information in Europe to support Community environmental policies and activities that may have an impact on the environment.⁹⁰ Other policy initiatives were then adopted with regard to maritime and traffic data and cultural resources (see paragraph 1.3).

Despite the progress made since the adoption of the PSI Directive, big barriers still exist and the huge potential locked up in the European PSI is far from being fully exploited. To a large extent, this failure is due to scarce awareness among public bodies about the huge potential of open data, and to legal complexity and technological barriers regarding the availability of the information in machine-readable format and interoperability. ⁹¹

On 12 December 2011, the European Commission launched an Open Data Strategy for Europe⁹² aimed at generating a € 40 billion boost per year to the EU economy by further promoting access and re-use of PSI. An Open Data package was presented that consisted of three elements: a Communication on Open Data⁹³ where the Commission identifies a series of measures necessary for overcoming the existing barriers to PSI re-use as a part of the Digital Agenda for Europe, a proposal for amending the PSI Directive⁹⁴ and a revision of the Decision governing re-use of the Commission's own information.⁹⁵

The present chapter aims at offering an overview of the European legal framework for the re-use of PSI, keeping the main focus on the provisions of the PSI Directive but also taking into account the

Utility of PSI= AccessAccessibilityRe-use limitations × Fair re-use conditions

In other words, the total utility of PSI is the result of: the access to PSI over the extent that PSI is accessible, divided by the legal limitations to re-use that PSI multiplied by the presence of fair conditions for the re-use of that PSI.' M de Vries, Reverse engineering Europe's PSI re-use rules – towards an integrated conceptual framework for PSI re-use, available at http://www.lapsi-project.eu/lapsifiles/Reverse%20engineering%20Europe%E2%80%99s%20PSI%20re-use%20rules.pdf.

 $^{^{89}}$ Directive 2003/4/EC of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC; OJ L 41/26, 14.2.2003.

⁹⁰ Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE), OJ L 108/50, 25.04.2007.

⁹¹ Furthermore — as pointed out by PSI expert Marc de Vries — PSI re-use can be hindered by the complex legal labyrinth surrounding it; indeed, such complexity is linked to the transcending nature of PSI re-use, since it blends four areas of law — freedom of information law, ICT law, intellectual property law and competition law — that, throughout the years, have been regulated at a European, national and even sectorial level, but in isolation. De Vries elaborates on an equation that effectively illustrates the interconnections among a number of complex legal aspects surrounding PSI re-use. If we take the maximization of utility of PSI as a starting point, conceptually, the four determining factors — Access, Accessibility, Re-use limitations, Fair re-use conditions — can be captured in the following formula:

⁹² See http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/11/891>.

Ommunication from the Commission to the European parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, 'Open Data. An engine for innovation, growth and transparent governance', draft version, (available at

http://ec.europa.eu/information-society/policy/psi/docs/pdfs/opendata2012/open-data-communication/opendata-E-N.pdf>.

⁹⁴ The amendment of the PSI Directive is scheduled for 2012; a provisional version of the proposal is available at http://ec.europa.eu/information_society/policy/psi/docs/pdfs/opendata2012/revision_of_PSI_Directive/proposal_directive_EN.pdf.

⁹⁵ The Commission will make its own data available through a new 'open data portal', the launch of which is expected for the spring of 2012. This portal is intended to serve as a single-access point for re-usable data from all EU institutions, bodies and agencies and national authorities.

experience matured by the Member States since its early implementation, which provided guidance for a Proposal, presented in December 2011, for the review of the PSI Directive (scheduled for 2012). The review of the PSI Directive is indeed a key action within the operative areas of the Digital Agenda for Europe, particularly in the context of the initiatives aimed at creation of a vibrant digital single market.⁹⁶

Finally, a part will be dedicated to compare the scope and the provisions of the PSI Directive with regard to spatial data with those of two other important and complementary regimes: the ones set by Directive 2003/4/EC on access to environmental information and by the INSPIRE Directive.

3.1 THE DRAFTING HISTORY OF THE PSI DIRECTIVE

Starting from the 1980s and following the unprecedented developments then occurring in the field of ICT, the European Commission began supporting the creation of a legal framework aimed at favouring the re-use and commercialization of European public sector information. In deploying its initiatives, the Commission focused on the competitive position of the European information industry in relation to the analogous American sector and identified its main point of reference in the basic structures of the more flourishing US information market, traditionally promoted – at least at the federal level – by a policy of open access, waiver of copyright, charges limited to marginal cost of reproduction and dissemination and no restrictions on commercial re-uses.

In 1989, the European Commission published a series of guidelines regarding the interaction between the public and the private sector in the information market and advocating the right for the private sector to use the information produced by public sector bodies in the performance of their governmental functions.⁹⁷

As to the principles governing charging, the Commission seemed to favour a marginal cost policy, stating however that these criteria can vary depending on the information at issue. The Synergy Guidelines were mainly criticized for emphasizing too much the needs of the public sector and for treating the issues of access to and re-use of PSI as two separated and non-coordinated problems.

Between 1991 and 1995 the European Commission funded a series of reports (the so-called Publaw Reports), respectively focusing on the various access legislations in the EC Member States, on the influence of the 1989 Guidelines and on the state of exploitation of PSI in all the Member States, evidencing the need for further initiatives to be taken by the Commission.⁹⁸

⁹⁶ In March 2010 the European Commission launched the Europe 2020 Strategy [Europe 2020 – A strategy for smart, sustainable and inclusive growth – COM (2010) 2020] to prepare the EU economy for the challenges of the next decade and get over the current crisis by achieving high levels of employment, a low carbon economy, productivity and social cohesion. The digital agenda for Europe is one of the seven flagship initiatives of the Europe 2020 strategy, whose overall aim is to deliver sustainable economic and social benefits from a digital information single market based on the access to fast and ultra-internet, information security policies and interoperable applications. See Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *A Digital Agenda for Europe*, Brussels, 26.8.2010, COM (2010) 245 final/2.

⁹⁷ Commission of the European Communities, Guidelines for Improving the Synergy between the Public and the Private Sectors in the Information Market, 1989.

⁹⁸ Commission of the European Communities, Publaw: Subject report general access to information legislation, CEC Legal Advisory Board, Luxembourg, 1991; Publaw 2: Draft final report Europe. A report to the Commission of the European Communities on an evaluation of the implementation of the Commission's Guidelines for improving synergies between the public and private sectors of the information

After a preliminary consultation carried out from June 1996 to 1998, the Commission presented its Green Paper on Public Sector Information in the Information Society,⁹⁹ which again put the accent on the huge potential of PSI exploitation for the growth of the European economy and sought to elaborate a definition of public sector information.¹⁰⁰

Contrary to the Synergy Guidelines, the Green Paper discussed the connection between the issues of access to and exploitation of PSI, raising the question whether differences among Member States relating to the access regime could hamper the re-utilization of such information in Europe. Member States' public bodies, as well as representatives of citizen organization and industry, participated with great interest in the debate triggered by the issue of the Green Paper. This document was then followed, in October 2001 and in the context of the eEurope initiative, by a European Commission's Communication on the exploitation of public sector information. 101 The Communication identified several obstacles to the development of a harmonized European information market (e.g. differences in administrative practices regarding availability of a digital format, time of replying to the request for access, exclusive deals already existing between public bodies and private firms or differences concerning the pricing policies applied by Member States to the same type of information) and found its guiding principle in the establishment of a general right of re-use; in other words, any time public sector information is generally accessible, the re-use of such information should be made possible. Given the necessity of maintaining a cautious approach towards the Member States, the aim of introducing a general right of re-use stepped significantly backward on the occasion of the 2002 European Commission's Proposal for a directive concerning the 're-use and commercial exploitation' of public sector information. 102 In fact, this right applied only to documents that were generally accessible according to the national access legislation and depends on the discretion of the public sector

market, CEC Legal Advisory Board, Luxembourg, 1993; Publaw 3: Final Report, CEC Legal Advisory Board, Luxembourg, 1995.

⁹⁹ Commission of the European Communities, Green Paper on public sector information in the information society. Public sector information: a key resource for Europe, COM (1998) 585.

^{100 &#}x27;The first issue treated in the Green Paper was the need for a definition of public sector information. Three approaches for the notion of public sector information were suggested. Firstly, the functional approach considered those bodies with state authority or public service tasks as being part of the public sector. This definition included an enormous number of institutions, but left the uncertainty of what exactly was meant by 'public service tasks'. A second approach, the legalist/institutional approach, considered only bodies that were explicitly listed in the relevant laws to have a public sector character. This definition had the advantage of being very clearly outlined, but also ran the risk of excluding a lot of institutions that were not formal public sector bodies, but nevertheless possessed essential public sector information resources. Finally, in the financial approach, the public sector included all bodies mainly financed by public funds (i.e. not operating under the normal rules of the market). Whatever approach would be chosen, the information of public bodies at different levels of government, central, regional and local, should be taken into consideration and state owned companies operating under market conditions and subject to private and commercial laws were not covered by these definitions. This was in line with 1989 Synergy Guidelines, where the definition of public sector administrations was a combination of the first and the third approach. The Green Paper did not take an explicit standpoint on the definition of information either. It only offered a number of possible divisions between different categories of information. A first possible distinction was the one between administrative and non-administrative information. [...] Another possible distinction of information was between information that was relevant for the general public and that which only mattered for a limited set of persons with a limited interest.' For an overview of the drafting process of the PSI Directive, are also K. Janssen, J. Dumortier, Towards a European Framework for the Re-Use of Public Sector Information: A Long and Winding Road, International Journal of Law & Information Technology, vol 11, n 2, 2003, p 191.

¹⁰¹ Commission of the European Communities, Communication to the Council, the European Parliament, the Economic and Social Committee and the Committee of Regions. *eEurope 2002: creating a EU framework for the exploitation of public sector information*, COM (2001) 607 final.

¹⁰² Proposal presented by the Commission for a European Parliament and Council Directive on the re-use and commercial exploitation of public sector documents, COM (2002) 207 final, 5 June 2002.

bodies on whether to allow the re-use of their documents.¹⁰³ As to the determination of an adequate pricing policy, the Communication left generous leeway to the Member States by stating that 'where charges are made, the total income from allowing access to or the re-use of these documents shall not exceed the cost of producing, reproducing and disseminating them, together with a reasonable return on investment'.

3.2 AN OVERVIEW OF THE PSI DIRECTIVE

Directive 2003/98/EC on the re-use of public sector information was finally adopted by the Parliament and the Council of the European Union on 17 November 2003. It provides a general framework for the conditions governing re-use of public sector documents in order to ensure 'fair, proportionate and non-discriminatory conditions for the re-use of such information' (recital 8).

This paragraph aims at providing a general overview of the Directive's structure and provisions, complemented by critical outlooks on the consultations and specific studies recently carried out with the endorsement of the European Commission to assess the current state of the art of the European re-use of PSI.

3.2.1 GENERAL PROVISIONS

3.2.1.1 Subject matter and scope

Article 1.1 enunciates clearly the subject matter of the PSI Directive, namely the creation of a 'minimum set of rules governing the re-use and the practical means of facilitating re-use of existing documents held by public sector bodies of the Member States'. According to recital 11, the Directive adopts a generic definition of the term 'document'¹⁰⁴ as covering any representation of acts, facts or information (and any compilation of such acts, facts or information) held by the public sector – which maintain the right to decide whether or not to authorize the re-use – regardless of the medium (written on paper, digitally stored or as a sound, visual or audio-visual recording).¹⁰⁵

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¹⁰³ For a thorough analysis of the 2002 Proposal, see J Pas, L Rechten, *The Commercialization of Government Information and the Proposal for a Directive COM (2002) 207 by the European Commission*, Murdoch University Electronic Journal of Law, vol 9, n 4, 2002.

Contrary to the Green Paper and 2001 Communication, the Proposal refers to 'public sector documents' instead of 'public sector information'. Janssen and Dumortier observe that even if the definition of 'document' is openly content-based, such a shift in the wording could be indicative of a Commission's choice for a 'document-based' system over an 'information-based' system. In the former, requests for access and re-use can only concern existing documents; on the other hand, in an 'information-based system', applicants can also ask questions on certain specific issues, thus putting the burden on the public sector to collect and combine information from different sources. See K Janssen, J Dumortier, 2003, p 197.

105 As to the different types of governmental information, M Van Eechoud proposes a categorization made in Dutch policy documents between research data, public registers, administrative data and auxiliary data. See M Van Eechoud, *The commercialization of Public Sector Information*, in L Guibault, PB Hugenholtz, *The Future of the Public Domain – Identifying the Commons in Information Law*, Kluwer Law International, The Hague, 2006, p 281-283.

As to the key notion of re-use, recital 8 clarifies that re-use takes place any time the documents collected, produced and disseminated by the public bodies to fulfil their public tasks are used for reasons that fall outside the domain of such institutional mandates.

The second paragraph of article 1 traces the contours of the Directive's scope; in doing so, article 1.2 adopts a negative formulation by listing the categories of documents that are excluded from the scope of application of the Directive:

- (a) documents the supply of which is an activity falling outside the scope of the public task of the public sector bodies concerned as defined by law or by other binding rules in the Member State, or in the absence of such rules as defined in line with common administrative practice in the Member State in question;¹⁰⁶
- (b) documents for which third parties hold intellectual property rights;
- (c) documents which are excluded from access by virtue of the access regimes in the Member States, including on the grounds of: the protection of national security (i.e. state security), defence or public security; statistical or commercial confidentiality;
- (d) documents held by public service broadcasters and their subsidiaries, and by other bodies or their subsidiaries for the fulfillment of a public service broadcasting remit;
- (e) documents held by educational and research establishments, such as schools, universities, archives, libraries and research facilities including, where relevant, organizations established for the transfer of research results;
- (f) documents held by cultural establishments, such as museums, libraries, archives, orchestras, operas, ballets and theatres.

In other words, the re-use regime applies exclusively to those categories of documents on which neither the public administration nor third parties hold exclusive rights. Particularly significant in this perspective are recital 22 and article 1.5, respectively mandating that intellectual property rights (intended as copyright and related rights, including *sui generis* form of protection) of third parties are not affected by the Directive and that the obligations set by the Directive 'shall apply only insofar as they are compatible with the provisions of international agreements on the protections of intellectual property rights, in particular the Berne Convention and the TRIPS Agreement'. Additionally, article 1.4 specifies that the level of protection of individuals, with reference to the treatment of personal data (regulated in particular by the Directive 95/46/EC), is absolutely not affected by the obligations set out by the PSI Directive.

The opportunity of extending the Directive's scope of application was discussed, among several other issues, in the context of an online consultation launched by the European Commission and carried out between September and December 2010. ¹⁰⁷ The outcomes of this consultation embraced the opinions of the different actors involved in the PSI value chain (PSI holders, PSI re-users, academics and experts, citizens, five Member States submitting official positions) and served as a basis for elaborating a Proposal for a new legal initiative amending the PSI Directive.

¹⁰⁶ The 2011 Proposal for revising the PSI Directive replaces point (a) with the following: 'documents the supply of which is an activity falling outside scope of the public task of the public bodies concerned, as defined by law or by other binding rules in the Member State in question'.

¹⁰⁷ Results of the online consultation of stakeholders 'Review of the PSI Directive' – Executive summary, 2011, available at http://www.lapsi-project.eu/publications>. The Commission received 594 responses (with an increase of 15% compared with the first consultation carried out in 2008) from 37 countries. Around 30% of the opinions were submitted by German participants and 80% of all results originated from 11 Member States (DE, FR, UK, FIN, ES, IT, BEL, NL, SWE, AT, PL). The Member States submitting official positions included the following: Belgium, Denmark, UK, Netherlands and France.

The vast majority of responses supported extending the scope of the Directive to public service broadcasters (72%), to the educational and research establishment (80%) and to the cultural establishment (73%). The main reason put forward by respondents in favour of such extensions is that PSI is funded through taxpayers' money and should therefore be accessible and re-usable. Belgium submitted that a general extension would simplify the European and national rules for implementation, considering also that the enlargement of scope to documents held by cultural institutions is consistent with the objectives of the Digital Agenda. On the other hand, several representatives of the excluded sectors pointed out that a large portion of the information at issue would be subject to copyright and other rights owned by third parties, in a way that such cultural institutions would not often be able to grant the right to re-use and would also often face the burden of identifying third-party rights and clearing complex copyright situations.

The Proposal for amending the PSI Directive, presented in December 2011, builds on the outcomes of this (and other) public consultations and addresses the opportunity of extending the scope of the Directive for admitting cultural institutions. Indeed, one of the main innovations of the Proposal consists of expanding the scope of the Directive to include libraries, archives, museums and university libraries, although in a way that limits for these public bodies the cost of implementation of the new PSI regulation.

Educational and research establishments remain excluded from the scope of PSI re-use, and the exclusion referred to in paragraph 2, point (e) is replaced by the following:

(e) documents held by educational and research establishments, such as research facilities, including, where relevant, organisations established for the transfer of research results, schools and universities (except university libraries in respect of documents other than research documents protected by third party intellectual property rights).

3.2.1.2 Definitions

101, 1.4.1998, p 1

The scope of application of the Directive is limited through the reference contained in articles 2.1 and 2.2 to the EU law-based notions of 'public sector body' and 'body governed by public law', which are taken from the public procurement Directives. 108

A 'public sector body' is defined as 'the State, regional or local authorities, bodies governed by public law and associations formed by one or several such authorities or one or several such bodies governed by public law'. According to article 2.2, 'body governed by public law' means any body

a) established for the specific purpose of meeting needs in the general interest, not having an industrial or commercial character; and b) having legal personality; and c) financed, for the most part by the State, or regional or local authorities, or other bodies governed by public law; or subject to management supervision by those bodies; or having an administrative, managerial or supervisory board, more than half of whose members are appointed by the State, regional or local authorities or by other bodies governed by public law.

Furthermore, recital 10 specifies that public undertakings are not covered by 'these definitions' (intended as the ones mentioned above, taken from the public procurement Directives).

As pointed out by the commentators involved in the LAPSI network, ¹⁰⁹ the Directive does not clarify what should be the relationship between, on the one hand, the 'general interest' characterizing the

¹⁰⁸ 92/50/EEC, OJ L 209, 24.7.1992, p 1, Directive as last amended by Commission Directive 2001/78/EC (OJ L 285, 29.10.2001, p.1); 93/36/EEC, OJ L 199, 9.8.1993, p 1, Directive as last amended by Commission Directive 2001/78/EC; 93/37/EEC, OJ L 199, 9.8.1993, p 54, Directive as last amended by Commission Directive 2001/78/EC; 98/4/EC, OJ L

needs met by the body governed by public law (thus considered as a public sector body to the effect of the Directive's scope) and, on the other hand, the scope of the 'public task' within which, according to article 1.2, lett. a), a certain public activity and the documents deriving from it are subject to the PSI Directive. Since the notion of 'public task' – as opposed to the one of 'needs in the general interest' – is not rooted in EU law, it is basically left to the Member States to determine that notion, at least by deciding what 'is an activity falling outside the scope of the public task of the public sector body'. The Directive therefore gives Member States significant leeway in determining which categories of documents fall under its scope of application. This arguably entails the risk of excluding important segments of otherwise re-usable PSI under article 1.2 lett a) (this risk is referred to by the LAPSI position paper as the risk of 'carving out'). 111

Moreover, as mentioned above, recital 10 excludes 'public undertakings' from the scope of the Directive by stating that the definitions of 'public sector body' and 'body governed by public law' do not cover public undertakings. Such an exclusion appears questionable, especially in regard to the case of a public undertaking that is engaged downstream in the supply of goods and services, an activity which could comply with the requirement of 'meeting needs in the general interest'. Considering this, the same entities could qualify as public undertakings under the public procurement Directives and as bodies governed by public law for the PSI Directive. This could lead to the risk of another undesired 'carving out' from the scope of the Directive, particularly as a result of organizational changes unilaterally brought by a Member State. This could be the case of a certain entity, which, for instance, was originally established as a body governed by public law and then underwent a privatization, thereby becoming a public undertaking no longer subject to the PSI Directive. In Indeed, such a withdrawal of data sets, besides jeopardizing the uniform interpretation of the PSI Directive, would contradict its very goal, identified in the 'creation of conditions conducive to the emergence of cross border, EU-wide information services'.

The third LAPSI position paper therefore suggests two alternative amendments to the wording of recital 10: either establishing that public sector bodies and bodies governed by public law shall be considered as such under the relevant provisions of the PSI Directive, irrespective of their status as public undertakings, or directly deleting the final part of recital 10 that refers to public undertakings.¹¹⁴

3.2.1.3 General principle

Article 3 sets forth the general principle according to which 'Member States shall ensure that, where the re-use of documents held by public sector bodies is allowed, these documents shall be re-usable for commercial and non-commercial purposes in accordance with the conditions set out in Chapters III and IV'. It further states that 'where possible, documents shall be made available through electronic

¹⁰⁹ LAPSI (Legal Aspects of Public Sector Information) is a European Commission-funded project on public sector information. The LAPSI network covers a substantial part of the European Union Member States and builds relationships with third countries such as the United States and Switzerland. It is intended to become the main point of reference for high-level policy discussions and strategic actions as to the legal issues related to PSI re-use. For more information, see www.lapsi-project.eu. See also M Ricolfi, Position Paper on the Consultation on behalf of the Comité de Sages on boosting cultural heritage online, 2010, available at https://www.lapsi-project.eu/lapsifiles/DigitalheritageconsLAPSI.pdf.

¹¹⁰ M Ricolfi. And J Drexl, M Van Eechoud, M Salmeron, C Sappa, P Tsiavos, J Valero (and F Pavoni and P Patrito - Evpsi), LAPSI Position Paper n 3, *The Exclusion of Public Undertakings' from the Re-use of Public Sector Information Regime'*, advanced version, 2011, available at <www.lapsi-project.eu/materials#papers>.

¹¹¹ See LAPSI Position Paper n 3, § 4.

¹¹² See LAPSI Position paper, § 9.

¹¹³ See § 12 of the LAPSI Position Paper n 3.

¹¹⁴ See § 13 of the LAPSI Position Paper n 3.

means'. In fact, the discretionary element exercised by the Member States - and enshrined in the wording of article 3 – is introduced by recital 9, which reads that the Directive 'does not contain an obligation to allow re-use of documents. The decision whether or not to authorize re-use will remain with the Member States or the public sector body concerned'. Additionally, article 1.3 leaves national access regimes absolutely unprejudiced by stating that 'the Directive builds on and is without prejudice to the existing access regimes in the Member States'. By asserting at recital 9 that its provisions will apply to documents made available for re-use, the Directive seems to imply a coherent European approach with regard to access, while the situation, by contrast, is significantly varied. Indeed, legislation on access presents great differences throughout the Member States¹¹⁵ as to categories of accessible documents, necessity of proving a certain interest in accessing materials held by public administrations and mechanisms of redress in case such access is denied. Such differences between States on access to information have arguably exercised a relevant impact in the implementation process and in the actual operativity of the PSI Directive.

The 2010 online consultation of stakeholders dedicated one specific question to this provision by asking whether all PSI that is already publicly accessible should also be available for re-use. A large majority of respondents (88%) were in favour (61% strongly in favour) of making all accessible PSI also re-usable. The advantages listed by the respondents were mainly based on economic reasons (the emergence of new business and employment, the reduction of transaction costs if re-use is possible under standard open licenses and for free, etc.) but also encompassed democracy-enhancing values, such as transparency and government accountability. 116 The reactions to this question somehow stressed the distance between the original project of designing a general right of re-use and the final wording of the Directive.

In fact, while the Green Paper acknowledged that the differences between Member States relating to access represented an obstacle in the perspective of developing a robust European information market, such considerations were deleted from the European Commission's Communication of 2001.

Indeed, that document, far from providing mechanisms for harmonizing access legislation, merely states that, except for the environmental information, the regulation of access to PSI remains primarily a matter of national, regional and local order.

The main innovation set forth by the 2011 Proposal for reviewing the PSI Directive consists of the introduction of the principle according to which all PSI that is accessible (thus, not explicitly covered by one of the exceptions listed by article 1.2) is therefore re-usable for commercial and non-commercial purposes. However, with regard to the cultural institutions to which the amended PSI Directive will be extended, the Proposal limits the possible financial effects and administrative burdens for the administrations by leaving the Member States with the possibility of deciding whether to authorize the re-use. The Proposal adds a second paragraph to article 3, specifying that 'for documents for which libraries (including university libraries), museums and archives have intellectual property rights, Member

¹¹⁵ For a comparative analysis of the right of access to information in Europe, see H Kranenborg, W Voermans, Access to Information in the European Union, A Comparative Analysis of EC and Member State Legislation, European Law Publishing, Groningen, 2005; M Mc Donagh, European Access Legislation: Consistence or Divergence?, in G Aichholzer, H Burkert (eds), Public Sector Information in the Digital Age, Cheltenham-Northampton, 2004, pp 108-122.

¹¹⁶ As to the Member States submitting official positions on this specific question, Belgium opposes amending the general principle, claiming that the Directive should offer enterprises what they require, so that it would be a preferable solution to keep re-usable information separated from the data accessible to all by virtue of open knowledge principles. On the other hand, the Netherlands, France and the UK support amending the general principle so that all accessible information would become re-usable. See pp 30-31.

States shall ensure that, where the re-use is allowed, these documents shall be re-usable for commercial and non-commercial purposes in accordance with the conditions set out in in Chapter III and IV'.

In its second policy paper,¹¹⁷ published on 22 January 2012, the Communia association¹¹⁸ defines the amendments to the PSI Directive presented in the Commission's Proposal aligned with one of the 14 recommendations released by Communia in January 2011, which states the following: 'The PSI Directive needs to be broadened, by increasing its scope to include publicly funded memory organizations – such as museums or galleries – and strengthened by mandating that Public Sector Information will be made freely available for all to use and re-use without restriction'. However, according to Communia, although the amended Directive clarifies that documents held by cultural institutions can only be made available when no third-party IPRs subsist in these documents, the formulation of the amended article 3.2 does not properly include the biggest category of works held by public cultural institutions, namely documents that are not covered by IPRs because of being in the public domain.

Therefore, the Communia association suggests implementing the wording of article 3.2 so that cultural materials in the public domain are explicitly included within the scope of the re-use obligations set by the amended Directive.¹¹⁹

3.2.2 REQUESTS FOR RE-USE

Article 4 of the PSI Directive states that public sector bodies should, possibly through electronic means, process the requests for re-use and make the documents available to the applicant. Where a license is needed for the re-use, the license offer must be forwarded to the applicant within a reasonable time limit, consistent with the period laid down with reference to the processing of the requests of access to documents. When no time limit has been established, the above-mentioned procedures must be concluded within 20 working days from the receipt of the request (exceptionally extensible by another 20 working days in case of complex requests).

If the public body adopts a negative decision, a notice should be addressed to the applicant according to the national access regimes (or to the national provisions implementing the Directive); where the negative decision is based on the fact that intellectual property rights are owned by third parties, the

The Communia second policy paper is available here: http://www.communia-association.org/wp-content/uploads/2012/01/120122communia PSI directive reaction.pdf>.

¹¹⁸ The Communia association carries on the work of the Communia Thematic Network on the digital public domain (http://www.communia-project.eu), which was funded by the European Commission from September 2007 until February 2011. Communia dedicated a significant part of its work to the issues of access to and re-use of PSI, and on 27-29 March 2009 organized a specific workshop on Accessing, Using, Reusing Public Sector Content and Data at the London School of Economics.

Communia proposes to add language to art 3.2 according to the following formulation: 'For documents for which libraries (including university libraries), museums and archives have intellectual property rights, or which are in the public domain, Member States shall ensure that, where the re-use of documents is allowed, these documents shall be re-usable for commercial and non-commercial purposes in accordance with the conditions set out in Chapters III and IV.' Furthermore, Communia encourages the use of standard labelling tools, such as the Public Domain Mark, to make the IPR status of PSI clear and promote PSI re-use.

administration must include a reference to the right-holder (where known) or, alternatively, to the licensor from which the public bodies obtained the materials.¹²⁰

Furthermore, according to article 4.4, the possible means of redress for appealing a negative decision shall also be indicated.¹²¹ As to the rules concerning the processing of re-use requests, the 2010 online consultation stressed the need for tightening or clarifying such rules. The respondent Member States submitted that there was no need for restricting or adapting these rules, while several academics claimed that the current time to respond is excessively long, considered that much of the re-usable PSI is already digitally available; additionally, it was pleaded that these provisions should address more specifically the matter of the appeal procedure and restrict the current (too) broad scope of interpretation by introducing terms such as 'reasonable' time delay or 'as far as possible'.¹²²

3.2.3 CONDITIONS FOR RE-USE

3.2.3.1 Available formats

According to article 5 of the PSI Directive, public sector bodies need to make their documents available in any pre-existing format or language, possibly through electronic means; such a provision does not entail an obligation for these entities to create or adapt certain documents to satisfy the requests nor does it mandate providing extracts when it could be too burdensome for the administration. Similarly, it cannot be deemed mandatory for public sector bodies to continue the production of determined documents exclusively on the basis of the re-use perspectives of a private or public sector entity.¹²³

The 2001 Proposal for amending the PSI Directive introduces a significant innovation: whereas in the current regime there are no specific obligations on the administration regarding the format for making available and disseminating PSI (there is just a generic reference to 'electronic means'), the Proposal mandates making available the information in machine-readable format and with their metadata.

3.2.3.2 The principles governing charging

Article 6 of the PSI Directive – the meaning of which is clarified by recital 14 – deals with one of the most complex and controversial points of the Directive, namely the definition of the principles governing charging for the commercial or non-commercial re-use of the whole of information held by public sector bodies. The Directive leaves great leeway for the definition of such criteria to the national

¹²⁰ The 2011 Proposal for revising the PSI Directive exempts libraries (including university libraries), museums and archives from including this reference.

¹²¹ The 2011 Proposal adds a paragraph at the end of art 4.4: 'The means of redress shall include the possibility of a review by an independent authority that is vested with specific regulatory powers regarding the re-use of public sector information and whose decisions are binding upon the public sector body concerned.'

¹²² See pp 31-32 of the Executive Summary of the online consultation.

¹²³ Question n 8 of the online public consultation is dedicated to the following issue: '[...] should more re-use friendly formats (e.g. machine readable, based on open standards software, xml format, etc.) be promoted? [...] in which formats and how?' 83% of the respondents expressed their favour for the adoption of 'more re-use friendly' formats, which should be machine-readable and possibly based on open source software. Particularly the following formats were suggested by the respondents: XML, Open Document Format, ASCII Text, net CDF, ESRI raster and shapefile. The Netherlands and Belgium supported the promotion of machine-readable formats, while France and the UK advocated exchanging good practices at the EU and national level and adopting open source formats.

implementations enacted by the Member States. In fact, despite expressing a preference for a marginal cost policy, 124 article 6 leaves Member States a significant margin of discretion as to the choices regarding charging by stating that 'when charges are made, the total income from supplying and allowing re-use of documents shall not exceed the cost of collection, production, reproduction and dissemination, together with a reasonable return on investment. Charges should be cost-oriented over the appropriate accounting period and calculated in line with the accounting principles applicable to the public sector bodies involved'. Recital 14 specifies that the recovery of costs, together with a reasonable return on investment, represents an upper limit for the public sector bodies releasing the relevant PSI, as any excessive price is deemed to be precluded; on the other hand, lower charges (or no charges at all) remain possible, depending on the policy adopted by the administrative entity in question.

Besides article 6 and recital 14, a number of other direct or indirect references to the principles governing charging can be found in the text of the Directive. According to commentators, these provisions and recitals can be grouped into three clusters, each of them representing a principle underlying the charging issue. Firstly, charging has to comply with one of the very priorities of the Directive, namely the creation of conditions 'conducive to the emergence of cross-border, EU-wide information services'; additionally, it must be consistent with non-market purposes such as enhancing democratic accountability and transparency of the governmental action. Secondly, the Directive establishes (article 10; recital 19) that the conditions for re-use should not be discriminatory, particularly when the public sector engages in the supply of information services and acts as a competitor of private re-users. Thirdly, the provisions concerning charging should be in accordance with the principles of proportionality and subsidiarity as set out in article 5 of the EC Treaty; therefore, the harmonization that the Directive seeks to carry out should not go beyond the achievement of its objectives.

It is quite clear, therefore, that the provisions more directly dealing with the issue of charging are the result of a normative compromise between those Member States more oriented towards principles of openness – typically enshrined in the policy of the US federal government¹²⁶ – and those who were traditionally more familiar with *cost recovery* practices.

In fact, the development of PSI-enhancing policies and of their respective charging mechanisms have historically followed two main models. In the marginal cost recovery model, aimed at exclusively charging the costs of reproduction and diffusion, the valorisation of the PSI is connected to the commercialization of the value-added products and services obtained from the original PSI, which results in a significant increase of tax revenue for the public sector. In the cost recovery model, on the other hand, the creation of value is directly attributable to the fact that public sector bodies apply charges when they supply information.

More than a decade ago, the PIRA study, commissioned by the Directorate General for Information Society, postulated the following:

Cost recovery looks like an obvious way for governments to minimize the cost related to PSI and contribute to maximizing value for money directly. In fact, it is not clear at all that this is

¹²⁴ Recital 14 reads: '[...] Member States should encourage public sector to make documents available at charges that do not exceed the marginal costs for reproducing and disseminating the documents'.

¹²⁵ M Ricolfi. And J Drexel, M Van Eechoud, K Janssen, MT Maggiolino, F Morando, C Sappa, P Torremans, P Uhlir (and M De Vries), LAPSI Position Paper n 1: 'The Principles Governing Charging' for Re-use of Public Sector Information, intermediate version, pp 1-6, available at <<u>www.lapsi-project.eu/materials#papers</u>>.

¹²⁶ For an overview of the US federal open information policy, see R Gellman, *The Foundations of the United States Government Information Policy*, in G Aichholzer, H Berkert (eds), *Public Sector Information in the Digital Age*, Cheltenham-Northampton, 2004, pp 123-136.

the best approach to maximizing the economic value of PSI to society as a whole. Moreover, it is not even clear that this is the best approach from the viewpoint of government finances. [...] Estimates of the US PSI marketplace suggest that it is up to five times the size of the EU market [...]. But the EU market would not even have to double in size for governments to recoup in extra tax receipts what they would lose by removing all charges for PSI. 127

In conclusion, the study stated clearly that by renouncing immediate revenue, the public sector satisfies two significant financial goals: increasing tax revenue thanks to the commercialization of PSI-originated information services and products and creating workplaces (thereby saving money that would be spent for supporting public welfare services).

One of the main arguments for a charging policy based on the marginal cost of reproduction and dissemination is that PSI is generated through taxpayers' money and therefore prospective re-users should not contribute once again for the use of those information resources whose creation they have already subsidized.¹²⁸

A recent study funded by the European Commission and carried out by Deloitte, the Pricing of PSI Study (POPSIS), assessed the effects of different schemes of supply and charging for PSI by examining the charging practices of 21 public sector bodies, ranging from zero and marginal cost models to full cost recovery models. The great majority of such case studies shows a clear tendency towards lowering charges and promoting re-use. The analysis indicates that where public sector bodies shifted to marginal and zero cost charging (or to a cost recovery model that is limited to the cost of facilitating re-use), the re-users increased by between 1,000% and 10,000%. As to the upstream effects of lowering charges, all case studies demonstrate that where public bodies have lowered their prices, demand volumes expanded by up to 7,000%. Furthermore, the cost of transition to further decreasing PSI charges appears relatively low, since the expertise and the infrastructure necessary for such a transition is mostly already available.

In the context of the 2010 online consultation, strong support (39%) was expressed for the idea of making PSI available for re-use at marginal costs of reproduction and dissemination of the documents, while 32% supported re-use at marginal costs as the default rule with certain limited exceptions. More

¹²⁷ Pira International, Commercial Exploitation of Public Sector Information, Executive Summary, Directorate General for the Information Society, 2000, p 10. The PIRA study represents the first attempt to calculate the weight and the potential of PSI re-use in the context of the European economy. PIRA's estimate for the value of European PSI was 68 billion EUR annually: a significant slice of the EU economy, but marginal if compared to the proportions of the corresponding US figure. In spite of the importance EU Member States are now placing on the commercial exploitation of PSI, none has such a politically clear and simple policy in place as that in the USA. The current position there shows that the debate has moved on from the local issues of access, charging, copyright, and resale, to matters such as the more detailed implementation questions, and increasingly to global PSI exploitation ones', p 23. Further studies were funded by the Commission in the following years to measure the state of exploitation of the European PSI; in this connection, the following are particularly significant: Micus Management Consulting Gmbh, Assessment of the Re-use of Public Sector Information (PSI) in the Geographical Information, Meteorological Information and Legal information Sectors, 2009; Helm (UK), Zenc (NL), MEPSIR Study (Measuring European Public Sector Information Resources), Final Report of Study on Exploitation of Public Sector Information – benchmarking of EU framework conditions, 2006.

¹²⁸ For a recent and comprehensive review of studies related to PSI exploitation and market, see Graham Vickery, Review of recent studies on PSI re-use and related market developments, Information Economics, Paris, 2011.

¹²⁹ European Commission, Information Society and Media Directorate-General, POPSIS, *Pricing of Public Sector Information Study*, October 2011, Summary Report available at

http://ec.europa.eu/information society/policy/psi/docs/pdfs/opendata2012/reports/Deloitte/summary.pdf>.

¹³⁰ See p 35 of the online Consultation. Around 10% of respondents agreed with a charging model based on cost recovery, together with a reasonable return on investment; approximately 13% expressed support for a full recovery policy; and more than 15% supported the adoption of a partial cost recovery model. As to the Member States expressing official positions, Belgium pleaded for charges based on full cost recovery together with a reasonable return on investment, while Denmark opted for marginal cost as an upper limit, thus excluding the possibility for the public sector to charge a reasonable return

specifically, the marginal cost model finds its rationale at the intersection between two opposite principles: one the one hand, the argument is made that the generation of re-usable PSI has already been funded by the general taxpayer; on the other hand, attention should be paid to the fact that a specific request of re-use can result in extra cost for the administration. Since there would be no apparent reason why the general taxpayer should also contribute to costs actually linked to a very specific request, charges could be considered appropriate – as exceptions to the marginal cost rule adopted as a default rule – to recover extra costs linked to a particular re-user. ¹³¹ The first LAPSI report therefore supports a regime which 'i. provides that charging is subject to an upper limit (or 'ceiling'), identified with the marginal costs of reproduction and dissemination of documents; ii. admits that the default rule is overridden by specific exceptions'. The same position paper suggests that these specific exceptions should comply with a number of principles: exceptions should be defined at the level of each public sector body (or at a higher level of governance where decisions involve overall tax policy), 'up front' and 'recurring' costs not specifically linked to the reproduction and redistribution on behalf of a specific re-use request may be exceptionally recovered if evidence is given that this does not entail high transaction costs and collection and production costs should also be allowed as exceptions. Moreover, support was expressed for the adoption of a black list – a notion already familiar to the domain of competition law – aimed at listing which exceptions to the default rule are not admissible. ¹³³

The 2011 Proposal for revising the PSI Directive intervenes significantly on the principles governing charging by setting the general upper limit for PSI re-use charges at not more than the marginal cost of reproductions and dissemination. Nevertheless, in exceptional cases public sector bodies can still charge the full costs, provided this is in the public interest and approved by the competent independent authority besides following objective, transparent and verifiable criteria. Such exceptions are admitted in particular when the public bodies fund a significant part of their public service task through the exploitation of the intellectual property rights they own (which is especially the case of UK trading funds).

Furthermore, the Proposal designs, again, a particular regime for cultural institutions (libraries – including university libraries – museums and archives), which are allowed to charge over and above the marginal cost of reproduction and dissemination. The wording of the current article 6 is not suppressed but remains as a reference criteria for the above-mentioned hypothesis of full cost recovery, becoming article 6.4. Moreover, a new paragraph is added that sets on the public sector body the obligation of proving that charges are in compliance with the criteria defined by article 6.

3.2.3.3 Transparency

on investment. France advocated maintaining the current provisions regarding charging, stressing that charging criteria should take into due account the nature of the data and the investment. The Netherlands expressed support for a model based on maximum marginal costs of making data available, which do not consider costs incurred for the production or collection of data, while the UK did not submit a preference for any of the listed options.

¹³¹ See p 7 of the first LAPSI Position Paper.

¹³² See p 15 of the first LAPSI Position Paper.

¹³³ See pp 15-16. The position paper provides examples as to the non-admissible exceptions to be included in the black list: 'prohibition of charges exceeding marginal reproduction and distribution not relating to one specific product (e.g. relating to groups of products), the rationale for the prohibition being that only very specific collection, production costs might be included in the charge; rule against 'stacking' of licenses: for any authorization requested, the re-user should in principle pay a single fee, not multiple fees; 'sampling' of data, i.e. access to samples of the data set, should never entail charges, to avoid creating entry barriers; rule against 'full line forcing' and 'tie-ins': on no event should the grant of a license be made conditional on the re-user to subscribe to a different license it has not requested; rule against charges – or continued charges – for non-updated data sets; prohibition of obligation on re-user to license back data it may have combined with the data set originally obtained'.

Article 7 mandates that re-use conditions and standard charges be pre-established and published possibly through electronic means, according to a principle of transparency. On request, public sector bodies should also declare the calculation criteria followed for the published charge and the factors that will be taken into account for the charges to be determined in atypical cases.¹³⁴

In the context of online consultation, 43% of the respondents stated that the current transparency rules concerning conditions and charges for re-use should be changed or clarified. As a respondent, Belgium expressed the same view, observing that PSI bodies have not yet developed appropriate accounting structures capable of properly satisfying the transparency mandate set out in article 7. 135

3.2.3.4 Licenses and public sector bodies' IPRs in the PSI Directive

PSI licensing is not envisaged by the Directive as a pre-requisite for PSI re-use. Article 8.1 arguably admits the situation where public sector bodies allow re-use of documents without any conditions. 136 Such an approach seems to recall the one typical of the US federal system, where public sector bodies do not hold any copyright in the information they produce and disseminate, resulting in the US federal PSI being in the public domain. 137 The same provision sets out that where the imposition of re-use conditions is deemed to be needed, where appropriate through a license, such conditions should not be used to restrict competition nor should they unreasonably restrict possibilities for re-use. The first paragraph of article 8 is left substantially unmodified by the Proposal for amending the PSI Directive, which simply introduces an example regarding the imposition of conditions: 'Public sector bodies may allow re-use without conditions or may impose conditions, such as indication of source, where appropriate through a license'.

The second paragraph of article 8 clearly encourages public administrations to resort to standard licenses, which can be adapted to satisfy specific applications and need to be available in digital format and processed electronically. 138

As observed by several commentators, the Directive does not directly tackle the problem of the conflict between the intellectual property rights on the PSI held by public sector bodies and the commitment to allow third parties to re-use such information as freely as possible. In this connection, the most relevant indications – to better interpret the meaning of article 8 – are expressed in the wording of recital 22 and 24. Recital 22 states two key principles, respectively reasserted and set out in articles 1.2 a) and 1.5,

¹³⁴ Art 7 of the 2011 Proposal for a new amended PSI Directive inserts the words 'over and above the marginal costs' after 'calculation of charges'.

¹³⁵ See p 44 of the 2010 online consultation.

¹³⁶ Art 8.1 reads as follows: Public sector bodies may allow for re-use of documents without conditions or may impose conditions, where appropriate through a license, dealing with relevant issues. These conditions shall not unnecessarily restrict possibilities for re-use and shall not be used to restrict competition.'

¹³⁷ In attempting to map the public domain, Pamela Samuelson offers two diagrams, the first one rather US-centric and the second aiming at offering a more international map of the public domain. The first map, in fact, shows laws, regulations and judicial opinions as public domain information resources. This may be accurate as a map of the US public domain, but a number of other countries, including the UK and Canada, allow copyright protection for laws, regulations and judicial opinions'. See P Samuelson, Challenges in Mapping the Public Domain, in L Guibault, PB Hugenholtz (eds), 2006, p 7 ff.

¹³⁸ The second Communia position paper argues that the article of the amended Directive dedicated to licensing makes reference to 'standard licenses' without sufficiently clarifying what should be considered as a standard license; moreover, according to Communia, it welcomes the development and proliferation of open government licenses instead of promoting the use of a single open license among the ones already existing and widely utilized worldwide (mainly, the ones offered by Creative Commons and the Open Knowledge Foundation). These points will be further presented and discussed throughout the following chapter, which is specifically dedicated to the analysis of the available open licenses for public sector contents and data and to the issue of marking re-usable information that is free from restrictions.

namely that '[t]he intellectual property rights of third parties are not affected by [the] Directive'¹³⁹ and that the provisions of the Directive should find application only insofar as they are compatible with the international agreements on the protection of intellectual property rights, particularly the Berne Convention and the TRIPS Agreement. Significantly, recital 22 further specifies that '[t]he Directive does not affect the existence or ownership of intellectual property rights of public sector bodies, nor does it limit the exercise of these rights in any way beyond the boundaries set by this Directive'; nonetheless, it ends stating that '[p]ublic sector bodies should, however, exercise their copyright in a way that facilitates re-use'. Recital 24 simply provides that the Directive does not prejudice the Copyright in Information Society¹⁴⁰ and Database Directives.

3.2.3.5 The copyright status of government information

Any consideration regarding the copyright status of PSI finds its necessary premise in the Berne Convention, which does not directly regulate this issue but rather authorizes discretionary choices by the Union Members as to the level of protection to be granted to the works authored by the state, particularly to official texts.

Article 2 bis 1 of Berne Convention reads that 'Union Members may exclude from protection political speeches and speeches delivered in the course of legal proceedings'. Article 2.4 further provides that 'it shall be a matter for legislation of the countries of the Union to determine the protection to be granted to official texts of a legislative, administrative and legal nature and to official translations of such texts'. The Convention does not offer any definition of the notion of 'official texts' nor does it refer to any document which is typically produced by the public sector. However, texts such as laws, decrees and judicial and administrative decisions are normally considered to have an official nature. State members of the Convention generally release their official texts in the public domain, and this exemption reflects a number of core democratic values: particularly, the idea that laws must be known and accessible to everybody and that the administration of the *res publica* should be carried out transparently and subjected to the scrutiny of citizens.

This trend is also generally shared by EU Member States: indeed, article 11 of the Dutch Copyright Act mandates that no copyright subsists in laws, decrees or ordinances issued by public authorities, or in judicial or administrative decisions. Coherently, article 8 of the Dutch Database Act provides for a similar exemption for databases containing laws, judgments and administrative decisions issued by public authorities.

Similarly, according to article 8.2 of the Belgian Copyright Act, official acts of the authority are not protected by copyright. The notion of 'official acts' is not considered to be equivalent to that of 'public document'; indeed, many public documents do not have the status of official acts and consequently can be granted protection. It has been argued that 'official acts' correspond to acts, regulations and executive measures, parliament works, judgments and indictments of the Crown Prosecution Service.¹⁴¹

¹⁴⁰ Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonization of certain aspects of copyright and related rights in the information society, OJ L 167, 22.6.2001, p 10.

¹³⁹ Recital 22 further reads: 'For the avoidance of doubt, the term 'intellectual property rights' refers to copyright and related rights only (including *sui generis* forms of protection). This directive does not apply to documents covered by industrial property rights, such as patents, registered designs and trademarks.'

¹⁴¹ On this point, Derclaye (2008) cites C De Terwagne, Société de l'information et mission publique d'information, March 2000, CRID; University of Namur and JP Traille, La commercialization des données détenues par le secteur public. Question relatives aux droits

Analogously, article 5 of the Italian Copyright Act excludes from the scope of copyright protection the official acts of the state and of other – both Italian and foreign – public administrative bodies.

The UK tradition of copyright management of government information represents a peculiarity in the context of the European legal framework; in fact, in the case of the central government and its agencies, where the agency is a Crown body, most of the information produced will be subject to Crown copyright and/or Crown database rights. This type of approach to the protection of official materials is shared by a number of other countries, mostly belonging to the Commonwealth of Nations (Australia, New Zealand, Canada, India, Pakistan, Nigeria, among others); hence, official documents are often covered by copyright, even if not exclusively through the specific scheme of Crown copyright.

Crown copyright is legally defined under section 163 of the UK Copyright, Designs and Patents Act 1988 as covering works made by officers or servants of the Crown in the course of their duties; it affects material created by civil servants, ministers and government departments and agencies. ¹⁴²A Crown copyright work that has been published will have copyright protection for 50 years from the end of the year in which the work was published. Unpublished works have a period of protection of 125 years from the end of the year in which the work was made or until 31 December 2039 (i.e. 50 years from the year in which the Copyright, Designs and Patents Act 1988 came into force). Copyright in a work that has been assigned to the Crown lasts 70 years after the death of the person who created it. The Crown database right is set out in 'The Copyright and Rights in Databases Regulations 1997' and lasts for 15 years according to the duration established in the Database Directive.

The Controller of Her Majesty's Stationery Office (HMSO), a part of The National Archives, manages all Crown copyrights and Crown database rights on Her Majesty's behalf. The National Archives license a wide range of Crown copyright and Crown database rights information through the Open Government License¹⁴³ (which will be analysed in the next chapter) and the UK Government Licensing Framework. Additionally, delegations of authority are granted to government departments and agencies to enable them to license the information that they create or hold. Crown copyright information previously available for re-use under waiver conditions (such as primary and secondary legislation, explanatory notes to legislation, government press notices, published papers of a scientific, technical or medical nature, unpublished public records, government forms, government consultative documents, etc.) can be re-used under the terms of the Open Government License, which was introduced in 2010 as a simpler set of terms and conditions that allows for the re-use of a wide range of information covered by Crown copyright and database rights. The National Archives are subjected to the National Archives and the National Archives are provided to the National Archives and the National Archives are provided to the National Archives are provided to the National Archives and the National Archives are provided to the National Archives and the National Archives are provided to the National Archives are provided to the National Archives and the National Archives are provided to the National Archive

Besides Crown copyright and Crown database rights, another institute is peculiar to the management of public sector bodies' copyright in the UK: the so-called Parliamentary copyright. Parliamentary

intellectuels, Contribution presented at the conference on commercialization of data held by the public sector, organized by the CRID in Namur, 25 November 1993.

¹⁴² There is a wide range of public bodies that do not have Crown status. Some of these non-Crown bodies are listed here: http://www.nationalarchives.gov.uk/information-management/our-services/uk-crown-bodies.htm>.

¹⁴³ http://www.nationalarchives.gov.uk/doc/open-government-licence/>.

The UK Government Licensing Framework (UKGLF) provides a policy and legal overview of the arrangements for licensing the use and re-use of public sector information, both in central government and the wider public sector. It sets out best practice, standardises the licensing principles for government information, and recommends the Open Government License (OGL) as the default license for public sector information. See http://www.nationalarchives.gov.uk/information-management/uk-gov-licensing-framework.htm.

¹⁴⁵ For further details of the information that is covered, see 'What the Open Government License covers' at http://www.nationalarchives.gov.uk /information-management/government-licensing/what-oglcovers.htm>. Further guidance on using information under the Open Government License can be found at http://www.nationalarchives.gov.uk/information-management/government-licensing/guidance-for>.

copyright is defined in Section 165 of the Copyright, Designs and Patents Act 1988 as covering works made by or under the direction or control of the House of Commons or the House of Lords. The following categories of material qualify for Parliamentary copyright protection: Lords and Commons Official Reports; Bills of Parliament; House Business Papers, including Journals of both Houses; Lords Minutes of Proceedings; Daily Business Papers (vote bundle); Commons Order Books, Commons Public Bill lists and Statutory Instruments lists; Weekly Information Bulletin; and Sessional Information Digest.

The rights in Parliamentary copyright are exercised by the Speaker of the House of Commons (for Commons material) and by the Clerk of the Parliaments (for Lords material). The vast majority of Parliamentary copyright material can be reproduced under the terms of the Open Parliament Licence.¹⁴⁶

Apart from official texts, which are mainly exempted from protection, much of the information produced and held by the public sector nonetheless qualifies for copyright protection provided it fulfils the necessary conditions of originality and creativity. A significant part of this information will arguably present a functional character and a factual nature, but, despite its quite low level of originality, there will still be grounds for protection any time the applied standard of originality is not too high. As to the definition of the originality criterion in the Netherlands, Van Eechoud and Van der Wal (2008) mention the landmark case *Romme v Van Dale*, decided in 1991 by the Dutch Supreme Court. The Court ruled that a work must have its own original character and reflect the personal imprint of its creator, which — in the case of a collection of words — can emerge from the selection and arrangement of the elements and words. Later, in the 2006 ruling *Technip v Goossens*, the Supreme Court reasserted that for scientific or technical productions consisting of unprotected scientific facts or data, the required level of creativeness can also be intended in terms of scientific or professional creativity, and not exclusively with regard to the artistic component. 148

As stressed by Estelle Derclaye, the almost contradictory combination of the Directive's statements as to the management of the government's IPR results from the fact that Member States avoided addressing an issue that would have been essential to deal with in order to reach a satisfactory level of harmonization: namely, whether the public sector bodies should own any exclusive right on the information they hold, create and disseminate in the context of the public tasks assigned to them.¹⁴⁹ Derclaye critically observed the following:

[A]rguably excluding all PSI from IPR would be the clearest, simplest and most effective solution.[...] more needs to be done if the EU information industry is to compete on a level-playing field with the USA, but more importantly for the citizens and in fact the whole world to be adequately informed. This is of the utmost importance in our times in view of the increasing dangers caused by humans to the planet, not to mention the global warming. If we want to react adequately, we need information and this is generally detained by governments. As we have all subsidized it, we arguably all have a right to have this information available free of charge and to re-use it as free as possible. For such acute global problems, time is of the essence. Public sector information needs to be freed now, not in five or ten years' time.

¹⁴⁶ See < http://www.parliament.uk/site-information/copyright/">..

¹⁴⁷ Supreme Court 4 January 1991, NJ 1991, 608 (Romme v Van Dale)

¹⁴⁸ Supreme Court 24 February 2006, NJ 2007, 36 (*Technip v Goossens*). The question before the court was whether a kinetic model, constituted in part by a collection of equations representing chemical reactions, can be considered an original work.

¹⁴⁹ E Derclaye, *Does the Directive on the Re-use of Public Sector Information affect the State's database* sui-generis *right?*, in J Gaster, E Schweighofer, P Sint (eds), *Knowledge Rights – Legal, societal and related technological aspects*, Austrian Computer Society, 2008, p

Mireille van Eechoud expressed a different viewpoint, emphasizing the opportunity to fund, on the same government-held IPRs, alternative paradigms for the managing of PSI:

As regards intellectual property, it is not realistic to propose the exclusion of public sector information from protection. It may even be counterproductive. As put forward by the open source and open archives movement, intellectual property rights may be used to counter overbroad claims in products or services based on government information; ¹⁵⁰... Dissemination based on so-called 'open' information models, notably Creative Commons, could be a viable option for a large quantity of government information. Open information models use intellectual property in an alternative way, to essentially further the non-discriminatory distribution of information at standardized and liberal terms, at no charge for the use of the information itself (royalty free). ¹⁵¹

These divergences find their origin in factual circumstances on which all commentators agree, i.e. the compromises that occurred during the drafting process of the PSI Directive between those Member States more partial to open access policies and those that were oriented towards controlling the re-use of their documents through IPR restrictions and cost-recovery models.

3.2.3.6 Practical arrangements

Article 9 is dedicated to the practical solutions to be arranged in the PSI re-use and reads as follows: 'Member States shall ensure that practical arrangements are in place that facilitate the search for documents available for re-use, such as asset lists, accessible preferably online, of main documents, and portal sites that are linked to decentralized asset lists.' In fact, PSI re-use is hampered by two classes of obstacles: not only legal limits (mainly concerning charging and licensing issues, access rules, etc.), but also by technical barriers, which make it very difficult for the prospective re-user to practically search for available information. The vast majority of the respondents to question n 12 of the 2010 online consultation – asking whether more measures should be taken to facilitate the search for re-usable documents – advocated facilitating the creation of online asset catalogues and portals and imposing an obligation on public bodies to make metadata available through open standards and a specialized search engine managed by the public authority. General re-users, public bodies and academics/experts supported the creation of platforms and portals on the model of the data.gov example, to be launched at a pan-European, national and local level; in particular – among Member States – the Netherlands pleaded for the European Commission to adopt a series of guidelines for the establishment of a European data portal aggregating national data portals (based on the INSPIRE model, for instance). 152

The 2011 Proposal introduces significant modifications to the standard of technical arrangements required for the administrations: these arrangements must facilitate a cross-lingual search for documents and consist of asset lists of the main documents with relevant metadata, preferably accessible online and in machine-readable format, and portal sites that are linked to decentralized asset lists.

¹⁵⁰ M Van Eechoud, *The Commercialization of Public Sector Information*, in L Guibault, PB Hugenholtz (eds), *The Future of the Public Domain – Identifying the Commons in Information Law*, Kluwer Law International, The Hague, 2006, p 301.

¹⁵¹ M Van Eechoud, B Van der Wal, Creative Commons Licensing for Public Sector Information: Opportunities and Pitfalls, Institute for Information Law, Amsterdam, 2008, p 99.

¹⁵² See pp 48-49 of the Executive Summary of the online Consultation.

3.2.4 NON-DISCRIMINATION AND FAIR TRADING

3.2.4.1 Non-discrimination

The Directive does not exclude in principle that a public sector body could use its documents for activities falling outside the scope of its public tasks, which 'will typically include supply of documents that are produced and charged for exclusively on a commercial basis and in competition with others in the market' (recital 9).¹⁵³

Article 10 mandates that any condition for re-use shall be non-discriminatory for comparable categories of re-use. The Directive, in particular, aims at defending the balance of conditions between private and public actors competing on the market. This means that any time a public sector body uses PSI for engaging in commercial activities falling outside the scope of its public tasks, thereby acting in competition with private entities, it must apply to itself the same conditions that it would apply to other users. Recital 19 further illustrates that the exchange of information between PSI holders can take place 'free of charge' as long as the transfer is aimed 'at the exercise of public tasks'; on the other hand, when the supply takes place in the perspective of public sector bodies engaging in commercial activities, the non-discrimination principle operates.

3.2.4.2 Prohibition of exclusive arrangements

Article 11 prohibits exclusive arrangements between the public sector body holding the documents and third parties. Nevertheless, such exclusive agreements can be exceptionally admitted when absolutely necessary for the provision of a service in the public interest, provided the reasons for granting the exclusive right are reviewed every three years. Given this approach, any exclusive arrangement established after the entry into force of the Directive needs to be published and applied anyway according to principles of transparency.¹⁵⁴

The 2011 Proposal for amending the PSI Directive specifies that such arrangements involving cultural establishments and university libraries shall be terminated at the end of the contract or in any case not later than six years following the entry into force of the Directive.

3.2.5 FINAL PROVISIONS

Article 13 set out an obligation for the Commission to carry out a review of the Directive before July 2008, which should particularly address 'the scope and impact of [the] Directive, including the extent of the increase in re-use of public sector documents, the effects of the principles applied to charging and

¹⁵³ See LAPSI Position Paper n 1, p 3.

¹⁵⁴ The UK APPSI (Advisory Panel on public Sector Information) submitted in the 2010 online consultation that no significant reduction of the exclusive agreements took place in the UK since the Directive was implemented. Nonetheless, a number of public sector bodies converted exclusive arrangements into non-exclusive licenses in the view of the new regime entering into force. The Advisory Panel recommends that all information regarding the remaining exclusive agreements be centralized in each Member State. Contrary to the APPSI, the UK Chartered Institute for IT submitted that a notable reduction in the number of exclusive agreements took place since the Directive was implemented. However, the majority of respondents – in all categories – stated that although exclusive agreements represent a problem, they are not a priority at the current review stage, so it would be sufficient to enforce the existing rules set out by the Directive.

the re-use of official texts of a legislative and administrative nature', together assessing further ways for supporting the growth of a harmonized and striving European information market. A first Directive's review was indeed carried out in 2008 and respondents submitted that the Directive had a positive effect on promoting PSI re-use in Member States by establishing a legislative framework in a previously unregulated market. However, important barriers were denounced as having remained and needing to be addressed in order to fully exploit the huge potential of the European PSI re-use. In particular, the respondents signalled problems such as

lack of awareness of the potential of PSI reuse and of the Directive amongst public sector bodies, especially at regional and local level, little effort from public bodies for facilitating and promoting re-use, lack of knowledge or mechanisms to identify what information is available for re-use, the non-mandatory requirement for PSI re-use, strict licensing conditions imposed by public sector content holders, the limits of the public task when public bodies commercially compete with private firms, unfair competition practices by public sector bodies, very limited transparency on public bodies re-use policies and notably on the way charges are calculated, and the absence of efficient means of redress in most countries. ¹⁵⁵

A second consultation – whose results have been discussed throughout this chapter – was carried out by the Commission in 2010. Despite evidencing several developments in the state of the PSI Directive's implementation, stakeholders expressed the need for assessing amendments of the Directive to better meet the re-users' needs and therefore creating conditions authentically 'conducive to the development of Community-wide services'.

The 2011 Proposal for amending the PSI Directive suggests that Member States shall submit a yearly report to the Commission regarding the extent and conditions of PSI re-use and the work of the independent authority mentioned in the revised article 4.4.

3.3 OTHER OPEN DATA INITIATIVES: FOCUSING ON THE DISSEMINATION OF SPATIAL AND ENVIRONMENTAL INFORMATION

In the previous paragraphs, we explored the principles governing the re-use of PSI in the European legal framework. This general re-use policy is complemented by other legislative or policy initiatives adopted in the last decade in specific sectors.

We already mentioned Directive 2003/4/EC on access to environmental information and the INSPIRE Directive, establishing an infrastructure for spatial data in Europe to support policies and projects that may have an impact on the environment.

These directives were then followed by other open data initiatives: in 2010 the European Commission adopted the Communication on Marine Knowledge 2020, ¹⁵⁶ aimed at improving the availability and dissemination of maritime data for economic growth, better spatial planning and integrated maritime surveillance; and several initiatives were carried out within the 2008 Action Plan for the Deployment of

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¹⁵⁵ See results of the online consultation of stakeholders, 'Review of the PSI Directive', 2008, p 2, available at http://ec.europa.eu/information-society/policy/psi/docs/pdfs/online-consultation/report-psi-online-consultation-stakeholders.pdf>.

¹⁵⁶ COM (2010) 461 final.

Intelligent Transport Systems (ITS), dealing with – amongst other things – access for private service providers to travel and real-time traffic data. 157

Furthermore, the Commission promoted policy initiatives regarding open access to scientific information, including a pan-European e-Infrastructure of Open Access Repositories, and policies for the digitization of cultural heritage and the creation of Europeana, the European digital library, archive and museum.

In particular, spatial data offer the opportunity of observing the interactions of three different types of policies promoting the availability of such data: access, re-use and sharing, each of them addressing a different purpose. In the European legal context, these policies respectively correspond to the above-mentioned three directives: the Directive on environmental information, the PSI Directive and the INSPIRE Directive. In this paragraph, we address the relationship between these three legal instruments whose scope overlaps significantly; in fact, as clearly explained by Janssen and Dumortier, 'the PSI directive applies to all public sector documents, the directive on environmental information addresses environmental information, and INSPIRE deals with spatial data'. Then, in particular, 'a significant proportion of spatial data relates to the environment and is created by the public sector'. ¹⁵⁹

But how does the interaction work between different users and types of use? Which directive corresponds to a certain type of use and to a certain category of users?

Let's start with access to spatial data: both public sector bodies and private users (citizens, companies) will be dealing with Directive 2003/4/EC and with chapter IV of INSPIRE Directive. The same categories of users will resort to the provisions of the PSI Directive when interested in re-using spatial data. Finally, the sharing of spatial data sets and services is regulated by chapter V of the INSPIRE Directive and exclusively involves public authorities.

We already discussed the main provisions and structure of the PSI Directive in the previous paragraphs; thus, a brief overview will be now dedicated to illustrating the key features and provisions of the other two directives.

3.3.1 THE INSPIRE DIRECTIVE

The INSPIRE Directive aims at laying down general rules for the establishment of the Infrastructure for Spatial Information in the European Community, from the perspective of Community environmental policies or activities that may have an impact on the environment. Infrastructure for environmental information is intended as 'metadata, spatial data sets and spatial data services; network services and technologies; agreements on sharing, access and use; and coordination and monitoring mechanisms, processes and procedures, established, operated or made available in accordance with the directive'. The main focus of INSPIRE is the sharing of spatial data sets and services between public authorities within the Member States and on the creation of conditions of interoperability for spatial data sets and services. With regard to this issue, on 23 November 2010 a Commission Regulation was

¹⁵⁷ COM (2008) 886 final/2; see also Directive 2010/40/EU of 7 July 2010 on the framework for the deployment of Intelligent Transport Systems in the field of road transport and for interfaces with other modes of transport.

¹⁵⁸ http://www.europeana.eu/portal/>.

¹⁵⁹ K Janssen, J Dumortier, Legal Framework for a European Union Spatial Data Infrastructure: Uncrossing the Wires, in H Onsrud, Research and Theory in Advancing Spatial Data Infrastructure Concepts, ESRI Press, 2007.

adopted ¹⁶⁰ (further amended with a Regulation of 4 February 2011) ¹⁶¹ aimed at implementing the INSPIRE Directive as to the interoperability of spatial data sets and services. Furthermore, chapter IV of INSPIRE deals with issues of access regarding a network of the following services: discovery services allowing searches for spatial data sets and services on the basis of certain metadata; view services for displaying, navigating and zooming spatial data sets; download services; and transformation services aimed at achieving interoperability. INSPIRE's scope covers spatial data that are in an electronic format and are held by or on behalf of either a public authority or a third party to whom the network has been made available on the basis of the compliance with rules regarding metadata, network services and interoperability. ¹⁶² Therefore, INSPIRE is based on a series of principles (laid down by the INSPIRE Working Group 2002): data should be collected and kept where it can be maintained most effectively; it should be possible to combine seamless spatial information from different sources across Europe and share it with many users and applications; geographic information needed for good governance at all levels should be readily and transparently available; and the conditions under which it can be acquired and used must be clearly stated. ¹⁶³

3.3.2 DIRECTIVE 2003/4/EC ON ACCESS TO ENVIRONMENTAL INFORMATION

In the European Union, access to environmental spatial data is regulated by the Directive on environmental information (which enshrines the principle of the Aarhus Convention) and by the above-mentioned chapter IV of the INSPIRE Directive. Directive 2003/4/EC on access to environmental information created an exception in the context of access regimes: whereas legislation on access is traditionally reserved to the exclusive competence of Member States – as we already emphasized in the previous paragraphs – access to information regarding environmental issues is harmonized throughout Europe. The directive aims at ensuring a right of access to environmental information held by or for public authorities – setting out the basic conditions for its exercise – and ensuring that this information is made available and disseminated to the public, particularly by means of ICT.

3.3.3 THE RELATIONSHIP BETWEEN THE THREE DIRECTIVES AS TO CHARGES AND IPRs.

¹⁶⁰ Commission Regulation (EU) No 1089/2010 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards interoperability of spatial data sets and services.

¹⁶¹ Commission Regulation (EU) 102/2011 of 4 February 2011 amending Regulation (EU) No 1089/2010 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards interoperability of spatial data sets and services.

¹⁶² See art 12 of INSPIRE.

¹⁶³ To explore the contribution brought so far by INSPIRE to Europe's 2020 strategic goals and to root its further implementation and development in the EU 2020 programme, see the materials presented in the context of the 2011 INSPIRE Conference (27 June - 1 July, Edinburgh), http://inspire.irc.ec.europa.eu/events/conferences/inspire_2011/?page=plenaries>.

Access to environmental information and examination in situ is ensured free of charge (Article 5.1), but public bodies can charge a reasonable amount for supplying such information (Article 5.2). 164 According to the PSI Directive, Member States are allowed to charge from no fee at all to an amount corresponding to the combination of the cost of collection, production, reproduction and dissemination, plus a reasonable return on investment. As to the charging principle of INSPIRE, the Council insisted on charging not only for downloading but also for viewing data, while the Commission and the Parliament advocated for keeping citizens' access to viewing services free of charge. 165 The final version of the INSPIRE Directive mirrors a compromise and mandates that public access to discovery and viewing services shall be free, unless the charge secures the maintenance of the spatial datasets and data services referred to in article 11.1, lett a); on the other hand, charges for sharing 'shall be kept to the minimum required to ensure the necessary quality and supply of spatial data sets and services together with a reasonable return on investment, while respecting the self-financing requirements of public authorities supplying spatial data sets and services, where applicable'. 166

With regard to IPRs, we already illustrated the relevant provisions of the PSI Directive that exclude documents on which third parties hold IPRs and encourage Member States to exercise their IPRs in a way that facilitates re-use. Article 4 of the Directive on access to environmental information is more overreaching and states that Member States may refuse to disclose the information required where such a disclosure will adversely affect intellectual property rights. During the drafting phase of INSPIRE, the European Commission and the Parliament supported the idea that IPR should not limit access to spatial data and services, while the Council advocated for the opposite solution to make the INSPIRE regime consistent with the exceptions of the Directive on access to environmental information. In the final version of the directive, public access cannot be limited on the basis of IPRs, but other services can be restricted.¹⁶⁷

CONCLUSIONS

Throughout this chapter we have mentioned the most significant open data legislative and policy initiatives carried out at the European level. The analysis was specifically concentrated on the PSI Directive's provisions, which are now the subject of a review and are likely to be amended in 2012 according to the Proposal presented in December 2011.

We observed how, apart from official texts (which are mainly exempted from protection), much of the information produced and held by the public sector can still qualify for copyright protection, provided it fulfils the necessary conditions of originality and creativity; additionally, as it was discussed

¹⁶⁴ According to Janssen and Dumortier (2007), the definitions contained in the Directive on access to environmental information have the limit of not being independent from future technological developments. In fact, the Directive distinguishes between making information available for on-site consultation and supplying that information. But it questions 'how we categorize viewing services on the Internet: as consultation or supplying? Making a document available for consultation allows the user to learn its content but not to retain a copy, while supplying a document provides the user with his own copy which he can consult afterwards. From a purely technical standpoint, viewing an Internet page leaves a cache

copy on the hard drive, even if it is only temporary. However, a more technological and perhaps common-sense interpretation of consultation [...] would make remote viewing services a form of consultation. This openness to interpretation illustrates the importance of formulating legal measures as much as possible in a technology-neutral manner'.

¹⁶⁵ Janssen, Dumortier (2008), p 241.

¹⁶⁶ Art 17.3 of INSPIRE Directive.

¹⁶⁷ Janssen, Dumortier (2007), p 240.

throughout the first chapter, a state's databases are not excluded from satisfying the requirements for being granted a *sui generis* right. The PSI Directive does not affect the existence or ownership of public sector bodies' IPRs; however, administrations are encouraged to exercise their rights in a way that facilitates re-use. Article 8 of the PSI Directive allows re-use of documents without conditions; alternatively, public sector bodies may impose conditions, where appropriate through a license and preferably by resorting to standard licenses.

The Proposal for revising the PSI Directive introduces some significant amendments: First of all, there is a general principle that all public information that is not covered by one of the exceptions listed in article 1.2 is reusable for commercial and non-commercial purposes. Furthermore, the Proposal expands the scope of application of the PSI Directive towards libraries (including university libraries), museums and archives and limits charges for re-use at the marginal cost of reproduction and dissemination, apart from cultural institutions and exceptional cases where the administrations can charge over and above such marginal costs.

The discussion of these and other amendments is scheduled for 2012 and the entering into force of the reviewed PSI Directive is planned to take place in 2013.

4. OPEN CONTENT LICENSING AND GOVERNMENT DATA

INTRODUCTION

In exploring the structure of the PSI Directive and its underlying principles, we encountered a number of recitals and provisions directly or indirectly dealing with the issue of licensing, whereas only one provision, article 8, is specifically dedicated to 'licenses', identified as a primary legal tool for enhancing the re-use of PSI. Article 8.1 clearly states that 'public sector bodies may allow for re-use of documents without any conditions or may impose conditions, where appropriate through a license, dealing with relevant issues'. Therefore, licensing is not identified as a precondition for re-use, but it is rather recognized as a subsidiary legal solution to maximize the actual re-use of information held by public sector bodies.

Indeed, where the PSI holder does not own any intellectual property right on the information made available for re-use – as is the case for US federal information – open data principles are well accomplished also in the absence of licenses. More precisely, the license as a legal instrument is neither needed nor correctly applied when attached to information on which no exclusive right subsists (e.g. mere factual data).

On the other hand, as illustrated in the course of chapter 1, the status of data collections can vary significantly between jurisdictions. Especially when dealing with the European *sui generis* right, it can be very complex to determine, even in light of the interpretative criteria expressed by the ECJ and by the doctrine, whether an exclusive right actually accrues and – with regard to public databases – whether it is necessary for public sector bodies to issue a license and for users to undertake obligations according to the terms of such license.

We also saw how this complexity, surrounding both the determination of these exclusive rights and the conditions of use, can generate uncertainty and thus be detrimental to PSI re-use. This is exactly where licenses play a role as the preferred legal tool for clarifying the IPR's protection over PSI datasets – if any – and for stating clearly the conditions of the re-use of such data.¹⁶⁸

When re-use is granted under 'conditions, where appropriate through a license', article 8.2 of the PSI Directive expresses a clear preference for standard licenses ('Member States shall encourage all public sector bodies to adopt standard licenses'). In this connection, we observe how, over the last years, standard license models have been proposed and adopted both at the national and at the international level as leveraging tools for boosting PSI re-use.¹⁶⁹

¹⁶⁸ The study published in 2008 by M Van Eechoud and B Van der Wal for CC-NL stressed the point that 'simply making available information via the Internet does not equal useful access to government information, if the recipient is left in the dark on what use of information may be made'. With regard to this issue, the main value of licenses arguably resides in their capacity of stating clearly the rights granted to the re-users and their obligations.

¹⁶⁹ See T Vollmer, D Peters, Creative Commons and Public Sector Information: Flexible tools to support PSI creators and re-users, available at http://epsiplatform.eu/content/topic-report-no-23-creative-commons-and-public-sector-information-flexible-tools-support-p-0>.

This chapter seeks to explore, first, when re-use initiatives can take place with no conditions through zero-rights reserved solutions (such as CC0, the Public Domain Mark or the Public Domain Dedication and License). Secondly, whereas the adoption of licenses has to be suggested, the solutions available in the open licensing environment for enhancing the re-use of public sector information are analysed, with a special focus on their characterizing features and on the way such models deal with data and databases.

The attention will first be dedicated to international licensing schemes such as Creative Commons, already widely adopted by public sector bodies throughout the world, and Open Data Commons, the latter specifically addressing the management of intellectual property rights over databases. Additionally, a thorough analysis will also be dedicated to national 'open government' models that have recently emerged, such as the UK Open Government License (OGL), the French Licence Ouverte (LO), the Italian Open Data License (IODL) and the Norwegian Open Data License (NODL).

4.1 LICENSING OR NOT? NO RIGHTS RESERVED SOLUTIONS FOR UNPROTECTED PUBLIC DATASETS

As clearly stressed also in the fourth LAPSI position paper (*The licensing of Public Sector Information*),¹⁷⁰ licenses do not appear as a necessary precondition for the re-use of PSI. The main ground for this statement is to be found in article 8.1 of the PSI Directive, providing that '[p]ublic sector bodies may allow for re-use of documents without conditions or may impose conditions, where appropriate through a license, dealing with relevant issues'.

Indeed, the availability of information for re-use without conditions attached is recommendable every time the public sector bodies concerned do not hold any intellectual property right over it. Of course, this is particularly evident in the case of US federal information, which is statutorily declared in the public domain. But the same holds true for public sector data, whenever they are not covered by IP protection, either because they have a factual nature and the reference jurisdiction does not foresee any copyright protection for such a non-creative collection of data, or because they do not satisfy the Database Directive's requirements for the grant of a *sui generis* protection. We saw in the first chapter that even if public datasets can often qualify for database rights protection, nonetheless in several situations the requirements for the investment in collecting, verifying and presenting the data are not met.

In all these cases, making the data available through licenses would unreasonably contradict the wording of the PSI Directive and the ethos of the open data movement, which advocates the avoidance of imposing a license over data that are already free per se.

In this connection, legal tools providing public domain solutions for data appear particularly welcome and recommendable. As stated in the fourth LAPSI position paper,

Public domain dedication and CC0 [whose role and features will be further presented in the following paragraphs] appear particularly appropriate when the PSI data set is to a large extent or even mostly unprotected by IPRs; the instruments may then complete the picture by

¹⁷⁰ M Ricolfi, and M Van Eechoud, F Morando, P Tsiavos (and L Ferrao), LAPSI Position Paper n 4, *The Licensing' of Public Sector Information*, p 3.

clarifying that, if and to the extent certain components of the data set are protected by an IPR, this IP protection is waived by the PSIH at the time the data set is made available.

4.2 LICENSING SOLUTIONS

4.2.1 INTERNATIONAL STANDARD LICENSES

In the following paragraphs we will analyse the main standard terms and optional elements of the two major international open content licensing models, which gained widespread diffusion and increasing recognition in recent years: Creative Commons and Open Data Commons.

4.2.1.1 THE CREATIVE COMMONS MODEL

Creative Commons is a non-profit organization founded in the United States in 2001 that provides individuals, companies and institutions with a simple and standardized set of copyright licenses and technical tools to make the ordinary 'full rights reserved' copyright approach more compatible with the huge potential of the Internet. Creative Commons thus advocates for a 'some rights reserved' approach, in a way that the combination of CC tools and users 'is a vast and growing digital commons, a pool of content that can be copied, distributed, edited, remixed, and built upon, all within the boundaries of copyright law'.¹⁷¹

4.2.1.1.1 Organization and features of the Creative Commons model

The initial license suite, launched in December 2002, offered eleven licenses. Such licenses were later reduced to six with the revision carried out in 2004 for the first launch of the 2.0 version, which made the Attribution element part of the core grant.

With around 20 million works licensed under CC, version 2.5 of CC licenses was launched in 2005 and the Science Commons¹⁷² project started.

Starting from version 1.0, the licenses have been first made available by the organization in generic or 'unported' versions, based on the definitions of US copyright law. The following stage, thus, has corresponded to the 'porting' process carried out by the national CC affiliates' teams. This procedure resulted in the release of 'national' versions of the licenses, consisting of the translation and adaptation of the unported licenses' clauses to the legal specificities of each jurisdiction. The aim of providing users with a jurisdiction-based version of the licenses was to enhance their acceptability and

^{171 &}lt;a href="http://creativecommons.org/about">http://creativecommons.org/about. See also the work of Creative Commons co-founder Lawrence Lessig, *The future of ideas. The fate of the commons in a connected world.* New York, 2001.

^{172 &}lt; http://creativecommons.org/science >.

comprehension among licensors and licensees, besides making them more familiar to public sector bodies and increasing understanding by judges, who are in charge of enforcing the licenses in courts.¹⁷³

Until version 2.5, the original unported licenses (called 'generic') were based on US copyright law, but as the porting process involved more and more jurisdictions (with licenses adapted to over 50 countries), the need to have a set of licenses drafted on more international terms emerged. For this reason the drafting of the unported 3.0 version – launched in 2007 – was based on the terminology of the major international conventions on copyright, such as the Berne Convention for the Protection of Literary and Artistic Works, the Rome Convention, the WIPO Copyright Treaty, the WIPO Performances and Phonogram Treaty and the Universal Copyright Convention. 174

Thereby, as specified by article8, letter f) of 3.0 version, definitions about rights and subject matter should 'be enforced according to the corresponding provisions of the implementation of those provisions in the applicable national law'. Coherently, the unported 3.0 version states, for instance, that moral rights – the enforcement of which vary throughout jurisdictions – are either retained or waived or not asserted in jurisdictions where it is possible. Similarly, it is provided that, depending on the jurisdictions, the licensor can choose whether to waive her right to collect royalties under non-waivable and waivable compulsory licensing schemes and voluntary licensing schemes. Furthermore, the CC-BY-SA 3.0 licenses now include a compatibility structure with licenses to be approved or certified as compatible by the same CC organization.¹⁷⁵

The Creative Commons licenses are available in three different formats:

- the *Common Deed* (or *Human-Readable Code*), which is a summarized version of the license's main clauses and option;¹⁷⁶
- a Legal Code (or Lawyer Readable Code), representing the actual full license having legal value;
- a *Digital Code* (or *Machine-Readable License*), which is metadata allowing authors to embed the text of the license in the HTML code generated for the license.

4.2.1.1.2 Standard terms and license elements

All the Creative Commons licenses, given their fundamental nature of standardized licenses, share a number of identical features.

All the Creative Commons licenses grant worldwide, royalty-free, non-exclusive and perpetual rights. With regard to the temporal scope of the license, the permission granted lasts for the duration of the

^{173 &#}x27;Jurisdictions teams also collaborate with CC headquarters staff to perform research, provide suggestions to improve the licenses' clauses and overall infrastructure, report on questions, use cases and issues arising in their jurisdiction, translate and create educational material and constitute a network advising on questions affecting user communities around the world.' See M Dulong de Rosnay, *Creative Commons Licenses Legal Pitfalls: Incompatibilities and Solutions,* Institute for Information Law, University of Amsterdam, 2010, pp 7 and 10.

¹⁷⁴ M Dulong de Rosnay (2010), p 70.

¹⁷⁵ Regarding this extension of the share-alike interoperability clause, see M Dulong de Rosnay (2010), p 69.

¹⁷⁶ The CC Common Deed reads as follows: 'The Commons Deed is not a license. It is simply a handy reference for understanding the Legal Code (the full license) – it is a human-readable expression of some of its key terms. Think of it as the user-friendly interface to the Legal Code beneath. This Deed itself has no legal value, and its contents do not appear in the actual license.'

copyright on the work. Even for cases in which the author decides to stop making the work available or to distribute it under more restricted terms, the rights already granted to earlier licensees will not be affected by such a change. This clause appears to be particularly important as a guarantee of legal certainty, especially with regard to derivative works.

The core suite of the 3.0 Creative Commons unported version is constituted of six main licenses. This six-license set results from the combination of four different elements:

- 'Attribution' (BY): This ceased to be an optional element and became a standard with the 2.0 Creative Commons version. Through the attribution element, the author lets others use the work provided they credit him/her for the creation.
- 'No Derivatives' (ND): The licensor authorizes commercial and non-commercial redistribution of verbatim copies of the work, but does not grant the permission to make derivative work based upon it.
- 'Non-Commercial' (NC): Licensees are allowed to use the work for only for non-commercial purposes. To allow commercial uses of the same work, a separate license will be needed.
- 'ShareAlike' (SA): The licensor authorizes users to create derivative works, but they are required to redistribute such works only under a license that is similar to or compatible with the Creative Commons license under which the original work was made available.

From the combination of the above-mentioned elements, the following six licenses result:

- <u>Attribution (BY)</u>: This standard license lets licensees distribute, remix and modify the work, even commercially, as long as they credit the author for the original creation.
- <u>Attribution Non Derivatives</u>: This license allows for commercial and non-commercial redistribution of the work, as long as it is utilized without any modifications and integrally and the author is credited.
- <u>Attribution ShareAlike (BY-SA)</u>: This license lets others copy, remix, modify and build upon the work even for commercial purposes, as long as they credit the author and license the new creations under identical terms, meaning that any derivatives will also allow commercial re-use.
- <u>Attribution Non Commercial (BY-NC)</u>: This license lets others copy, remix, modify and build upon the work non-commercially.¹⁷⁷
- <u>Attribution Non Commercial ShareAlike (BY-NC-SA)</u>: This license lets others copy, remix, modify and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under identical terms.
- <u>Attribution Non Commercial Non Derivatives (BY-NC-ND)</u>: This license is the most restrictive within the Creative Commons suite. It allows others to copy and redistribute the work only as long as the author is credited, but they cannot create derivatives or re-use the work for commercial purposes.

¹⁷⁷ Although their derivative works must also acknowledge the author and be non-commercial, users don't have to license their derivative works on the same terms, meaning they can also opt, for instance, for a 'full rights reserved' or for a BY-NC-SA.

4.2.1.1.3 Creative Commons Zero (CC0) and the Public Domain Mark (PDM)

Besides the Creative Commons core suite, two other fundamental tools have been made available in the 'all rights granted' scheme of the public domain: the Creative Commons Zero (CC0)¹⁷⁸ and the Public Domain Mark.¹⁷⁹

CC0 is a legal tool that operates as a waiver of copyright and related or neighbouring rights (including *sui generis* right and moral rights) to the fullest extent permitted by law. Consequently, anyone can use the work in any way and for any purpose – also commercial. If the waiver isn't effective for any reason, CC0 acts as a license from the affirmer granting everybody an unconditional, irrevocable, non-exclusive, royalty-free license to use the work for whatsoever purpose. Indeed, the third paragraph of the CC0 document ('Public License Fallback') provides that

Affirmer hereby grants to each affected person a royalty-free, non-transferable, non-sublicensable, non- exclusive, irrevocable and unconditional license to exercise Affirmer's Copyright and Related Rights in the Work (i) in all territories worldwide, (ii) for the maximum duration provided by applicable law or treaty (including future time extensions), (iii) in any current or future medium and for any number of copies, and (iv) for any purpose whatsoever, including without limitation commercial, advertising or promotional purposes (the 'License').

Especially for the cases in which it is not easy to determine whether the work (for instance, a database of mostly factual data) qualifies for copyright or *sui generis* protection, CC0 can be an optimal tool for clarifying to the general public that the affirmer was committed to surrendering any protection to the broadest possible extent. However, a person using CC0 is still responsible for the rights that a third party may have on the work; therefore, if a work licensed under CC0 contains the work of another person, made available under a different CC license, the author shall be attributed and the respective license provided. CC0 provides the affirmer with the opportunity of specifying the jurisdiction from which the work is being offered. This indication cannot act as a choice of law or forum selection clause, but only operates as a signal for prospective users to understand what they can or cannot do with regard to that specific work.

On the other hand, for works that are already in the public domain worldwide, Creative Commons rather suggests the adoption of another tool, the Public Domain Mark (PDM). The PDM is intended for labelling works on which copyright restrictions have expired, or works that have been affirmatively placed in the worldwide public domain prior to the expiration of copyright by the right's holder. According to CC, the PDM should not be used to mark works that are in the public domain in some jurisdictions while being restricted by copyright in others. That is the case, for instance, of data collections whose protection can vary significantly throughout jurisdictions. On the other hand, the PDM can still represent a viable solution for those categories of PSI that are already in the public domain or for raw data (neither copyrightable nor protectable with a *sui generis* right) collected by public bodies.

Furthermore, another 'no rights reserved' legal tool – specifically designed for data and databases – has been made available in recent years: the Open Data Commons Public Domain Dedication and License (PDDL). The PDDL (which will be analysed in paragraph 4.2.1.4.1) arguably shows analogies in its

^{178 &}lt; http://creativecommons.org/about/cc0 >.

^{179 &}lt;a href="http://creativecommons.org/about/pdm">http://creativecommons.org/about/pdm">.

structure with CC0; in fact, the PDDL operates at the same time as a waiver, when a jurisdiction allows rights and claims to be relinquished and waived, and as a license, in the context of jurisdictions not allowing such a relinquishment or waiver of rights.

Finally, regarding the relationship between CC0 and the Public Domain Mark, it must be stressed that whereas the latter can be used by anyone and is intended for application to works that are already in the public domain, CC0 can only be used by authors or holders of copyright and related or neighbouring rights (including the *sui generis* right).

With regard to public sector data, it means that CC0 is a suitable model for collections of data on which public sector bodies hold copyright or database right, but also – and particularly – for those databases whose level of protection appears questionable (for the reasons explained in chapter 2). In this way the public authority relinquished its (questionable and blurred) exclusive right to clarify to the general public the opportunity of freely using these resources and thus maximizing the value and potential of such data.

The Public Domain Mark (PDM) differs from CC0 and from the other CC licenses since it is not a legal instrument – there is no legal code attached – but it is rather a 'label' through which anyone can mark and tag a work that is already in the public domain.

The PDM can be applied to any work that is free from copyright restrictions; therefore, this label can be applied even to metadata, if it is not copyrightable or is otherwise free of copyright. With the launch of the PDM, Creative Commons no longer recommends the Public Domain Dedication and Certification (PDDC); in fact, the PDDC served at the same time the two purposes of allowing a copyright holder to dedicate a work in the public domain and to label a work as being in the public domain. Creative Commons observed that this kind of solution was not practical but indeed rather misleading, so when CC presented CC0 in early 2008, this legal tool was intended to take on the dedication function that the PDDC had previously accomplished.¹⁸⁰

Finally, just like CC0 and the other CC licenses, the PDM has a metadata-supported deed and is machine-readable so that properly tagged works can be easily traced over the Internet.

Given its features and structure, the PDM appears particularly useful when applied to public data that are openly unprotected (because they do not satisfy the requirements for protection) or because the copyright/sui generis protection of such publicly held materials has expired.

4.2.1.1.4 The sui generis right in the context of the present CC model: towards CC 4.0

One of the main features of difference among jurisdictions is arguably represented by the *sui generis* right, appearing - as often stressed in the previous chapters - as a peculiarity of the European legal framework. Indeed the debate occurred on the occasion of the CC 4.0 version launch – which took place in September 2011 during the Warsaw CC Global Summit – significantly identified as one of its major points the issue of how to regulate the *sui generis* right within the CC model.

¹⁸⁰ The Creative Commons website specifies, however, that for those who have used the PDDC in the past, the organization will continue to serve the PDDC deed. See http://wiki.creativecommons.org/PDM_FAQ>.

Currently, databases are covered by the 3.0 unported versions of the CC licenses only as long as they constitute a copyrightable work and no reference is explicitly dedicated to the *sui generis* right. In fact, the definition of 'work' includes the '"literary and/or artistic work offered under the terms of this License including without limitation any (...) compilation of data to the extent it is protected as a copyrightable work. ¹⁸¹

Thus, has the database right ever been considered as a subject matter within the CC licensing set?

Starting from version 2.0, the *sui generis* database right has been included as a subject matter in the porting process of the CC licenses by few European jurisdictions. Indeed, only in the Netherlands, Belgium, France and Germany did CC version 2.0 and 2.5 license the database right along with copyright, contemplating 'extraction and reutilization' of substantial parts of a database covered by *sui generis* right as the elements corresponding to the rights of reproduction, performance and distribution for works protected by copyrights and neighbouring rights.¹⁸²

But the initiative triggered the critics of the CC central organization for a number of reasons. First, it was argued that the CC licenses were intended to protect the fruits of a creative effort rather than just an investment. Secondly, because the database right was a purely European phenomenon, a significant risk was deemed to exist with reference to the legal certainty of database producers residing outside Europe. Finally, the argument was made (especially by Science Commons) that such a European peculiarity would spread and be exported to jurisdictions – such as the United States – that do not grant by statute this kind of protection. 183

As a result, CC defined an iCommons porting policy regarding the treatment of the *sui generis* right in versions 3.0 of CC licenses.¹⁸⁴ Coherently with this policy, while the decision was made not to mention the *sui generis* rights in the generic and international (unported) license suites, the database right was also substantially eliminated from the scope of the European 3.0 versions of the CC licenses. Indeed, it was established that the database right should be waived and that the optional elements (Attribution, Non-Derivatives, Non-Commercial and ShareAlike) should no longer be applied to those parts of the work that are deemed to be included within the license's definition of work solely on account of compliance with the criteria of the *sui generis* database law under national law implementing the European Database Directive.

As a consequence of this waiver, we can easily have a situation where the licensor of a database licensed under a CC BY-NC-SA 2.0 France, who expects commercial uses to be excluded and derivatives to carry the SA element, is actually disappointed in their original expectations. In fact, according to the SA interoperability clause, any derivative of the database may be relicensed under a license stating that the restrictions cannot be applied to a database covered by the *sui generis* right, resulting in a second derivative that will no longer be shared with the ShareAlike and Non-Commercial element.

Melanie Dulong observed how, as a side effect, the (waived) database right does not submit to the general clause forbidding the application of Technical Protection Measures (TPM), in such a way that makes it unclear whether the waiver of the *sui generis* right and the restriction to apply a TPM on the

¹⁸¹ Art 1, lett f).

¹⁸² M Dulong de Rosnay (2010), p 71.

¹⁸³ See L Guibault, Creative Commons Licenses: What to Do with the Database Right?, Computers and Law Magazine of SCL, vol 21, issue 6, p 3.

^{184 &}lt; http://wiki.creativecommons.org/images/f/f6/V3 Database Rights.pdf>.

individual works would also impede the application of a TPM on the database.¹⁸⁵ Additionally, the argument is made that the impossibility of reserving commercial rights on the use of a database can disappoint both the licensors and the licensees.

As pointed out by Lucie Guibault, the exclusion of the database right from the scope of CC licenses could lead to two opposite reactions by the European community of CC users. Either they would accept making the contents of their database available without restrictions, or they would look for a license allowing them to apply such restrictions.

As to the first possibility, the launch of CC0 in February 2010 arguably satisfies the need of those who want to release their database' contents without any restrictions. Applying CC0

overtly, fully, permanently, irrevocably and unconditionally waives, abandons, and surrenders all of Affirmer's Copyright and Related Rights [including database rights] and associated claims and causes of action, whether now known or unknown (including existing as well as future claims and causes of action), in the Work (i) in all territories worldwide, (ii) for the maximum duration provided by applicable law or treaty (including future time extensions), (iii) in any current or future medium and for any number of copies, and (iv) for any purpose whatsoever, including without limitation commercial, advertising or promotional purposes (the 'waiver'). ¹⁸⁶

On the other hand, it is evident that the strong position assumed by CC gave other organizations – first of all the Open Knowledge Foundation, with the Open Data Commons project (which will be illustrated in the following paragraphs) – the chance of coming out with 'competing' licenses, specifically addressing the database right and its peculiarities, and also allowing for restrictions.

4.2.1.2 OPEN CONTENT LICENSES' STANDARD TERMS AND PSI RE-USE: OPPORTUNITIES OF COMPATIBILITY

In recent years a strong interest arose regarding the opportunity of conjugating the features of the existing open content licensing models with the principles of open access to and free re-use of public sector information. Several studies dealt with the analysis of the specific standard terms of open licensing and aimed at exploring the compatibility of such clauses with the legal framework, European and extra-European, surrounding PSI re-use.

With regard to the compatibility between the clauses of the CC licenses and the principles set by the PSI Directive, one of the most ground-breaking studies was delivered by Mireille Van Eechoud and Brenda Van der Wal for CC-NL in 2008. The study concludes the comparison between the specific terms of the Creative Commons set of licenses and the principles for re-use enshrined in the PSI

¹⁸⁵ Could works licensed under a CC 3.0 license, but contained in a database which is not licensed under a CC license, be impossible to download conveniently as a whole because even if the right to extract substantially has been waived, the use of a TPM is not excluded?', M Dulong de Rosnay (2010), p 95.

¹⁸⁶ Art 2 of CC0 1.0 Universal further states that 'Affirmer makes the Waiver for the benefit of each member of the public at large and to the detriment of Affirmer's heirs and successors, fully intending that such Waiver shall not be subject to revocation, rescission, cancellation, termination, or any other legal or equitable action to disrupt the quiet enjoyment of the Work by the public as contemplated by Affirmer's express Statement of Purpose.'

Directive by grouping such terms in three different categories. In particular, a distinction is made between fully compatible terms, fairly compatible terms and poorly compatible terms.¹⁸⁷

A relevant number of the CC features appears to comply strongly with the re-use framework, being thus qualifiable as 'White – reuse enhancing terms'. Such features correspond, first, to the non-discriminatory and standardized character of the CC suite, to their geographic (worldwide) and temporary scope (which equals the duration of copyright). But the following also significantly foster the PSI re-use principles: the royalty-free feature, the automatic downstream granting of licenses to re-users from the initial licensee and the existence of mechanisms enhancing the searchability of re-usable contents. The same can be said for those CC clauses requiring the re-user to keep intact and specify the original source of the information and its copyright status.

Van Eechoud and Van der Wal conclude that the share-alike feature is poorly compatible ('Grey – fairly reuse compatible – terms') with the re-use framework, even if less problematic than when applied in the context of the access legislation and freedom of information law principles. The share-alike clause appears not to be recommended, since it can severely restrict the models of businesses that companies may be interested to develop starting from the re-use of PSI.

The same conclusion is shared by LAPSI's fourth position paper:

There is no doubt that the 'viral' feature has greatly contributed to the expansion of the digital commons. It would appear, however, that the purpose of PSI legislation is to allow re-use of PSI rather than 'nudging' re-users, who may be civil society members, large businesses as well as start ups, to adopt a certain contractual behavior in connection with their own original contributions they may wish to combine with re-used PSI. 189

For analogous reasons, the CC clause prohibiting the application of technical protection measures (TPM) is to be considered scarcely compatible with the PSI re-use principles, even though the PSI Directive does allow anti-TPM clauses. In fact, the TPM tool can reinforce the development of business models, despite limiting the access to re-usable PSI.

Furthermore, the charging policies defined by the PSI Directive are not absolutely inconsistent with the no-royalty feature of the CC licenses; in fact, charges not exceeding dissemination costs, thus related to the distribution of the contents more than to their use, are generally compatible with the CC scheme. Obviously, the CC licenses do not represent a suitable solution for those public bodies operating under a cost-recovery model; in this case, again, the CC BY-NC and CC BY-NC-ND can have a complementary role next to other proprietary licensing schemes.

According to the same study, two of the CC optional elements are unsuitable in the perspective of implementing the PSI Directive's re-use principles: the NC element – which will be further discussed across this paragraph – and the ND element, which is also essentially in contrast with the purpose of the PSI re-use framework, aimed at fostering PSI value-adding activities that cannot prescind from the creation of derivatives.

LAPSI's contribution also sought to explore whether other licensing issues further facilitating the reuse of PSI could be brought forward by legislative measures, firstly by amending the current provision of article 8. The fourth LAPSI position paper clearly states that a crucial role will be played in the future

¹⁸⁷ Van Eechoud and Van der Wal, 2008, pp 73-74.

¹⁸⁸ Van Eechoud and Van der Wal, 2008, p 56.

¹⁸⁹ M Ricolfi, and M van Eechoud, F Morando, P Tsiavos (and L Ferrao), LAPSI Position Paper n 4, *The Licensing' of Public Sector Information*, p 7.

– as recently reasserted by the Digital Agenda – by factors such as *openness* and *interoperability*, which share both a vertical dimension (intended as interoperability of data sets of different kinds) and a horizontal dimension (intended as the compatibility between the re-use conditions stipulated by PSI holders in different Member States). In this view, openness must be analysed in its technological and legal component, the latter being connected to the notion of interoperability which LAPSI derives from the INSPIRE Directive.¹⁹⁰

In the context of the online consultation, strong support was expressed by PSI holders, academics and re-users for standard, non-exclusive licenses and for the widespread adoption of the Creative Commons licensing framework or, alternatively, for the elaboration of analogous uniform licenses.¹⁹¹ LAPSI argued that, despite international licenses being the natural candidates for better answering issues of interoperability, a number of such issues are likely to emerge anyway both under national and international licenses. For instance, in the debate concerning the opportunity of opting for license models that rule out commercial re-uses of the PSI at issue, the matter of the 'chain of authorizations' must be taken into due account. In fact, institutions such as Wikipedia and its like cannot incorporate contents presenting restrictions as to the commercial nature of the re-use, with the clear consequence that the PSI dissemination would be greatly limited.¹⁹² Additionally, the adoption of licenses preventing commercial re-use of PSI has been assessed quite limitatively for the initiative of firms intending to enter the market, arguably without affecting – on the other hand – the plans of a leader firm, which would remain able to generate the information it intended to use and combine by itself.¹⁹³

LAPSI suggests that guidance should be given at the EU level on whether the adoption of the sharealike feature for standard licenses is convenient or not.

Specifically, the application of the share-alike feature to open data licenses has been explored in a Canadian report (the CIPPIC report) published in October 2011, 'Analysis of Share-Alike Obligations in Municipal Open Data Licenses'. The report states – thus agreeing with the findings of the other European studies – that even though the share-alike element can successfully satisfy a number of purposes in various contexts, it appears unsuitable for the idea of enhancing access and re-use of PSI, despite many Canadian municipalities – including Ottawa, Vancouver, Edmonton and Toronto – having incorporated this feature in their open data licenses.

According to the authors, the share-alike element originates in a different context – that of free and open source software licenses, with the General Public License including this provision – as the main purpose of SA is avoiding the risk of seeing an open source software project turned into a closed-source project.

¹⁹⁰ Art 3.7 of Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE) reads: 'interoperability refers to the possibility for data sets to be combined and for services to interact, without repeated manual intervention, in such a way that the result is coherent and the added value of the data sets and services is enhanced'.

¹⁹¹ Representatives of the COMMUNIA network recommended taking into account the following standard legal tools: CC0; the Public Domain Dedication and License; the Public Domain Mark.

¹⁹² See p 5 of the LAPSI Position Paper n 4. See also M Ricolfi, *Input-Output in Open Licensing*, available at http://www.epsiplus.net/guest-blogs/(author)/19089>.

¹⁹³ See p 6 of the LAPSI Position Paper n 4. See also M Van Eechoud, B Van der Wal, Creative Commons Licensing for Public Sector Information: Opportunities and Pitfalls, 2008, p 56; M Ricolfi, Re-Use Licenses: Commercial or Non-Commercial. This is the Question!, available at http://www.epsiplus.net/guest_blogs/(author)/19089>.

¹⁹⁴ D Fewer, K Mewhort, Analysis of Share-Alike Obligations in Municipal Open Data Licenses, Samuelson-Glushko Canadian Internet Policy and Public Interest Clinic (CIPPIC study), 12 October 2011.

However, a city open data portal operates much differently than the software context and the typical Creative Commons context. A city data license should try to foster many different communities and many different uses of the data – not aim for one single use. The datasets that a city possesses are diverse, with a diverse range of possible users and uses. If a set of users wishes to spawn off their own project, rather than share-back to an existing one, the city should encourage this additional use. This will maximize the overall potential of data. A license without a share-alike restriction will lead to a much wider set of possible uses by different individuals, communities and businesses – a fundamental objective of municipalities launching open data portals. ¹⁹⁵

Additionally, whereas in the open-source context a share-alike clause can be useful to prevent a proprietary business from appropriating the work and competing directly with the original creator, in the context of municipal data, the government has no need to limit the competition 'against' itself. Indeed, it is quite unlikely that someone will try to offer the same service by setting a competing data portal; even more relevant, there is no reason why this activity should be discouraged by the municipalities, to the extent anyone offers enhanced data. Competition-related issues are also triggered by the share-alike clause when companies are offering the open data integrated into new products and services; in fact, they would be required to share the elaboration of such data with anyone, including competitors.

The CIPPIC report also focuses on two common 'misconceptions' as to the necessity of the share-alike clause for open data. First, without a share-alike clause, users will easily appropriate the work without any attribution. The same clause is necessary for governments to satisfy their information stewardship obligations (i.e. ensuring that public records are properly managed, updated and preserved). With regard to the first, it is argued that in open licenses, users are required anyway to abide with terms such as attribution, irrespective of any share-alike obligations. Concerning the difference between a general obligation in an open content license and a share-alike obligation, the study reads as follows:

- a) a share-alike clause prevents a user from adding further restrictions onto a work, whereas a general obligation only requires a user to maintain existing obligations. With a general obligation license, a user may still introduce further restrictions, thereby permitting interoperability with many other open licenses;
- b) a share-alike clause often extends to all collections and datasets that include or integrate a licensed work, placing everything else in the collection under the same terms. A general obligation only applies to the single original work within a collection and to derivative works directly based off of the original. ¹⁹⁶

As to the second 'misconception', the argument is made that the stewardship obligations of the municipalities with regard to the data released on open data portals should not extend to re-users. In fact, a simple attribution requirement enables all downstream users to find the original source of data, even where a new dataset has been created as a derivative work and released under restrictive licensing terms.

¹⁹⁵ CIPPIC study, 2011, p 3. 196 CIPPIC study, 2011, p 4.

4.2.1.3 ADOPTING THE CC LICENSING SCHEME FOR GOVERNAMENTAL DATA: A WORLDWIDE EXPERIENCE

Over the last few years, an increasing number of central and local governments have opted for the adoption of Creative Commons licenses as a standardized and default tool to make public sector information available for re-use. The cases that follow represent successful examples of implementation of the CC model to the information held and produced by public sector bodies, while also evidencing a rather clear preference by the same public bodies for the CC-BY and CC0 schemes.

Some of the most pioneering and successful experiences concerning open government policy developments and widespread application of CC licenses to public sector information undoubtedly come from the Australasian area. The Australian Government Open Access and Licensing Framework (AusGOAL)¹⁹⁷ was launched in July 2011, building on the experience of the Queensland Governments GILF (the Government Information Licensing Framework started in 2008) and qualifying as Australia's nationally endorsed open access and licensing framework. AusGOAL is focused on open access and licensing of 'publicly funded information' (PFI); it is collaborating with realities across a range of sectors which produce or manage publicly funded information and aims at unifying all of Australia's publicly funded information, including PSI, within one open access and licensing framework. The AusGOAL platform is under a default CC-BY license, while there are eight recommended licensing solutions: the six Australian 3.0 CC licenses (plus the Public Domain Mark), the Restrictive License Template (RLT) for materials containing personal or other confidential information and the BSD 3-Clause Software License, which can be applied to software where the code does not include a code licensed under GNU GPL License.¹⁹⁸ However, within the CC suite, CC-BY is identified as the preferable solution for the re-use of publicly funded information.

Furthermore, three of the main sources of Australian government datasets – Australian Bureau of statistics, ¹⁹⁹ Geoscience Australia²⁰⁰ and the platform data.gov.au²⁰¹ – are licensed by default under CC-BY 2.5 and under CC-BY 3.0 Australia.²⁰² Contrary to the unported general version, the definition of 'work' given by the Australian 3.0 version does not mention the copyright-protected collection of data as a subject matter of the license. Since the database right protection is of course also not available, how then do CC licenses apply to the data made available on these open data portals? As the copyright sections of such Internet platforms state, all the materials and data published on these websites constitute Commonwealth copyright; therefore, the CC licenses find application to the data because of representing a Commonwealth copyright and independently of their value as collections.

The release of the New Zealand Government and Open Access and Licensing framework (NZGOAL)²⁰³ was announced on 6 August 2010. The NZGOAL provides guidance to agencies regarding the release of copyrighted works and non-copyrighted materials for re-use and elaborated a

¹⁹⁷ AusGOAL provides support and guidance to government and related sectors to facilitate open access to publicly funded information; see http://www.ausgoal.gov.au/>.

¹⁹⁸ For further information and materials on the AusGOAL licensing suite, see http://www.ausgoal.gov.au/the-ausgoal_licence-suite>, under CC-BY 3.0 Australia.

^{199 &}lt;a href="http://www.abs.gov.au/">http://www.abs.gov.au/>, under CC-BY 2.5 Australia.

^{200 &}lt;a href="http://www.ga.gov.au/">http://www.ga.gov.au/>, under CC-BY 3.0 Australia.

²⁰¹ This website provides access to re-usable datasets from the Australian government and from state and territory governments.

²⁰² A long list of other Australian public administrations adopting CC licenses and reports recommending CC use can be found at the following link: http://wiki.creativecommons.org/Government use of Creative Commons>.

^{203 &}lt; http://ict.govt.nz/guidance-and-resources/information-and-data/nzgoal>.

series of principles, called the NZGOAL Policy Principles, stating the government's position on issues related to the re-use of PSI.

Key within the Policy Principles are the Open Licensing and Open Access Principles.²⁰⁴ The Open Licensing Principle states that state agencies should make their copyrighted works that are made available online for re-use under the most open of licensing terms within NZGOAL – the Creative Commons Attribution (BY) license – unless a restriction applies. If a restriction applies, it may be appropriate to apply an alternative Creative Commons license or not release the material for re-use at all. Similarly, for non-copyright materials, the Open Access Principle states that agencies should provide public online access to such re-usable information using a 'no-known rights' statement unless a restriction applies.

In the Netherlands, since 2010 the website <<u>www.rijksoverheid.nl</u>> has replaced the websites of individual ministries and agencies and has gathered in one uniform government's web platform the information made available for re-use by Dutch public sector bodies. All the materials published there are available for re-use under CC0 as a default copyright policy unless otherwise indicated.

In Italy, the newly launched portal < www.dati.gov.it > 205 makes datasets available for re-use under a variety of licensing schemes, where the public body releasing the information can choose among CC-BY (in all existing versions), CC0 and the Italian Open Data License (IODL) 1.0 – which will be analysed in paragraph 4.2.2.3. The first institutional data portal systematically applying CC licenses in Italy was the open data platform of the Regional Government of the Piedmont Region; 206 the contents of that website are made available under a CC-BY 2.5 Italy, while the available databases are released under CC0. Furthermore, the Italian National Institute of Statistics (ISTAT) also recently adopted CC-BY 3.0 Italy for all the contents published on its website. Of course, where a database is deemed to be protected by a *sui generis* right, the Attribution requirement will not apply to this database, since the database right has been waived with the Italian (and, in general, European) versions of 3.0 CC licenses. Therefore, this Attribution element applies only to copyright-protected contents and databases.

All contents available on the official website of the President of the Russian Federation – <<u>www.kremlin.ru</u>> – were also released under a CC-BY 3.0 unported license. Moreover, other Russian institutions adopted the CC model for making available for re-use the information they hold: for instance, contents on the information portal of the official authorities of <u>the Republic of Bashkortosta</u>²⁰⁷ are licensed under a CC-BY, while contents on the website of the Volgograd Oblast's administration²⁰⁸ are made available under CC BY-SA.

In the United States, works made by the federal government – as pointed out in the course of this study – are in the public domain. Therefore, materials appearing, for instance, on the website of the White House are non-copyright-protected, pursuant to federal law, while – interestingly – third-party contents published on the same website are licensed under a CC-BY 3.0 license.²⁰⁹

In contrast to the federal level, state governments can exercise copyright over their works. Nonetheless, a number of state-level institutions identified in the CC licenses a suitable tool for making their

²⁰⁴ See < http://nzgoal.info/quick-guides/quick-guide-for-agencies/>.

²⁰⁵ The Open Data catalogue currently contains 176 datasets from 38 different administrative bodies. See http://www.dati.gov.it/ricerca_dataset.

^{206 &}lt; http://www.dati.piemonte.it>.

^{207&}lt;http://www.bashkortostan.ru/>.

^{208&}lt; http://www.volganet.ru/>.

^{209 &}lt; http://www.whitehouse.gov/copyright >.

information available to re-users (including compilation of data to the extent copyrightable); for instance, the contents published on the website of the New York State Senate²¹⁰ are licensed under a CC BY-NC-ND United States license.

4.2.1.4 THE OPEN DATA COMMONS LICENSES

Open Data Commons²¹¹ is a project hosted and run by the Open Knowledge Foundation²¹² aimed at providing legal solutions for open data. In March 2008 the project launched the first license model specifically addressed to data, the Public Domain Dedication and License (PDDL) – 'Public Domain for data/databases'.²¹³

Two other licensing schemes were launched in the context of the Open Data Commons project: the Attribution license (ODC-By) – 'Attribution for data/databases' (January 2010), and the Open Database License (ODC-ODbL) – 'Attribution Share-Alike for data/databases' (June 2009). For each of the three licenses, two formats are available: a Plain Language Summary and a Full Legal Text.

4.2.1.4.1 The ODC Public Domain Dedication and License (PDDL)

The Plain Language Summary of the PDDL²¹⁴ summarizes some of the key terms of the document, which is intended to allow users to freely share (copy, distribute and use), create (produce derivative works from the database) and adapt (modify, transform and build upon) the work – meaning either or both the database (covered by copyright or *sui generis* right) and its contents (defined as the 'data' and including 'information, independent works or other material collected into the database') – for any purpose and without any kind of restrictions, permanently and irrevocably. In fact, users can use the work commercially and apply technical protection measures and they are neither required to attribute the creator of the data or database nor to provide further users with a copy of the license.

The Full Legal Text²¹⁵ of the license is preceded by a disclaimer, clarifying that Open Data Commons does not provide legal services of any kind and that the information is provided 'as is', in a way that any damages resulting from its use are disclaimed.

Because of the inherently national character of copyright law, and given the relevant differences among jurisdictions as to relinquishing and waiving intellectual property rights, the PDDL document acts at the same time as a waiver and as a license: first, the relevant rights and claims are relinquished and

^{210&}lt;http://www.nysenate.gov/>.

^{211&}lt;http://opendatacommons.org/>.

^{212 &}lt; http://okfn.org/">http://okfn.org/>. The Open Knowledge Foundation is a non-profit organization founded in 2004 and acts as one of the main international leaders in the promotion of open knowledge in many different forms.

²¹³ Open Data Commons was created in December 2007 as a platform for the drafting of the first 'open' database license, the Public Domain Dedication and License, which was written by Jordan Hatcher and Dr Charlotte Waelde. In January 2009 the Open Data Commons project was transferred to the Open Knowledge Foundation. The Foundation is in charge of the daily administration of the project, whilst its Advisory Council is responsible for the drafting and management of the licenses. See http://opendatacommons.org/about/>.

²¹⁴ The human-readable summary of the PDDL is available at http://opendatacommons.org/licenses/pddl/summary/.

²¹⁵ The full text of the PDDL document is available at this link: http://opendatacommons.org/licenses/pddl/1.0/>.

waived; alternatively, for jurisdictions or areas of law not allowing for such relinquishment or waiver of rights, the document operates as a license. The document is declared to be aimed at placing the database and its contents in or as close as possible to the public domain and is intended for use on databases or their contents, either together or individually.

The article of the PDDL dedicated to definitions refers to the term 'work', which can be either, or both, the database and its contents (the data). Such concepts are clearly distinguished in the context of the PDDL document; in particular, right-holders can apply the PDDL scheme both to the database and its contents or, alternatively, they can use the document to cover only the database and leave the contents regulated by other licensing models.

The legal rights explicitly covered are copyright and database right, whilst the application of the document is excluded for computer programs used in the realization of the database, patents over the data or database and trademarks associated with the database.

Article 3.0 of the PDDL document, entitled *Dedication, waiver, and license of Copyright and Database Right'*, is divided into three subsections, respectively dealing with (i) the dedication of copyright and database right to the public domain (article 3.1), (ii) the waiver of rights and claims in copyright and database right when section 3.1 dedication is inapplicable (article 3.2), and (iii) the license of copyright and database right when articles 3.1 and 3.2 are inapplicable.

Therefore, article 3.1 states that once the work has been dedicated to the public domain and copyright and database right have been relinquished, all present and future rights are intended to be covered in the relinquishment, which applies worldwide and encompasses media and formats that will be created in the future.

Pursuant to article 3.2, when the above-mentioned dedication does not apply or is not valid in the relevant jurisdiction, based on article 6.4 (which reads that 'the Document takes effect in the relevant jurisdiction in which the Document's terms are sought to be enforced'), ²¹⁶ then the right-holder waives any rights and claims (also for the future) over the work in copyright and the database right to the extent possible in the relevant jurisdiction. Finally, when article 3.1 and 3.2 are not applicable in the context of a certain jurisdiction, article 3.3 provides that

the Licensor grants [...] a worldwide, royalty-free, non-exclusive, license to use the duration of any applicable Copyright and Database Right. These rights explicitly include commercial use, and do not exclude any field of endeavor. To the extent possible in the relevant jurisdiction, these rights may be exercised in all media and formats whether now known or created in the future.

As to the waiver of moral rights,²¹⁷ an analogous distinction is operated between jurisdictions allowing such a waiver to the fullest extent possible and jurisdictions where such a waiver is not possible, so that

²¹⁶ Section 6.4 further reads as follows: 'If the rights waived or granted under applicable law in the relevant jurisdiction includes additional rights not waived or granted under this Document, these additional rights are included in this Document in order to meet the intent of this Document.'

²¹⁷ The three ODC licenses do not apply a distinction, when dealing with moral rights, between databases protected by copyright and by the *sui generis* right. Indeed, the traditional category of moral rights – including the right to object to treatments that could prejudice the author's honour or reputation – is deemed to accrue exclusively with reference to copyright-protected databases, and commentators normally exclude moral rights from attaching to a database protected exclusively by virtue of a *sui generis* right. See Derclaye (2008), p 53 and the same commentator in *Intellectual Property Rights and Human Rights: Coinciding and Cooperating*, in Paul Torremans, *Intellectual property and human rights, Kluwer Law, Information Law Series*, 2008, p 143.

the licensor 'agrees not to assert any moral rights over the work and waives all claims in moral rights to the fullest extent possible by the law of the relevant jurisdiction'.

Similarly to the CC licensing scheme, the PDDL document is declared to be provided by the right-holder 'as is', without any express or implied warranty; but again, given the fact that certain jurisdictions do not admit the exclusion of implied warranties, such an exclusion may not apply to the user of the work. Additionally, subject to any liability that may not be excluded or limited by law, the right-holder cannot be held liable for loss or damage caused to anyone by the use of the document. ²¹⁸

4.2.1.4.2 The ODC Attribution License (ODC-BY)

The Open Data Commons Attribution License is presented in its preamble as a license agreement intended to allow users to share, modify and use the database freely subject only to the Attribution requirements set out in article 4 ('Conditions of use').

With regard to the legal effects of the document (Article 2.1), the license is defined as a) a license of applicable copyright and neighbouring rights; b) a license of the database right; and c) an agreement in contract between the licensee and the licensor. The licensor grants through the ODC-BY scheme a worldwide, royalty-free, non-exclusive license to use the database for the duration of any applicable copyright and database rights, terminable only under the terms of article 9 and explicitly allowing commercial exploitation.

Among the rights granted, the following are mentioned: a) extraction and reutilization of the whole or a substantial part of the contents; b) creation of derivative databases; ²¹⁹ c) creation of collective databases; ²²⁰ d) creation of temporary or permanent reproductions by any means and in any form, in whole or in part, including of any derivative databases or as part of collective databases; and e) distribution, communication, display, lending, making available, or performance to the public by any means and in any form, in whole or in part, including of any derivative database or as part of collective databases.

Article 9 provides that any breach by the licensee of the terms and conditions of the license triggers the automatic termination of the license, without need of any notice to the licensee. Such termination however does not extend to those who have received the database (or a substantial part of its contents, or derivative databases, or the database as part of a collective database) to the extent their use is fully in compliance with the license. Regardless, the ODC-BY (as well as the ODC-ODbL, which will be discussed later) foresees the possibility for the licensee to have his full rights reinstated, provisionally or permanently, provided the breach is ceased and the violation is corrected according to article 9.4.

²¹⁸ As to the liability that cannot be excluded by law, § 5.3 limits such liability to actual and direct financial loss to the extent it is caused by proven negligence by the right-holder.

²¹⁹ Section 1 dedicated to definitions specifies that 'derivative database' is intended as 'a database based upon the Database, and includes any translation, adaptation, arrangement, modification, or any other alteration of the Database or of Substantial part of the Contents. This includes, but is not limited to, Extracting and Re-utilizing the whole or a Substantial part of the Contents in a new Database'.

²²⁰ A 'collective database' corresponds to the licensed database in unmodified form as part of a collection of independent databases that together are assembled into a collective whole. The ODC-BY license further specifies that a work which constitutes a collective database is not considered, under the terms of the license, as a derivative database.

Furthermore, analogously with the Creative Commons licenses, the licensor reserves the right to stop distributing or making available the database; nonetheless, the cessation of the database distribution does not entail the withdrawing of the license, in such a way that the license continues deploying its force and effects unless terminated on the grounds of a breach of its terms and conditions.

According to the ODC-BY conditions of use, when publicly sharing the database, any derivative database or the database as part of a collective database, besides conveying the database exclusively under the terms of the license, the licensee is required to include a copy of the license or its URI with the database or derivative database and to keep intact any copyright or database right notices referring to the license. Moreover, section 4 introduces a discretionary element regarding the location of the required notices by mandating that, in case it is not possible to put them in a particular file given its structure, such notices must be included in a place (for instance, a significant directory) where users would probably search for them.

Article 4.4 explicitly excludes the possibility of sublicensing the database; thereby, every time the licensee communicates the database, the whole or substantial parts of the contents, or any derivative database to anyone else in any way, the recipient is offered a license to the database with the same terms and conditions of the original license.

With reference to moral rights, article 5 states that the licensor is required to waive all such rights in the database to the fullest extent possible allowed by the law of the relevant jurisdiction. On the contrary, when such a waiver is not possible, the licensor renounces asserting moral rights and waives any claims over these rights to the fullest extent possible. Finally, for jurisdiction allowing neither waiver nor agreements not to assert moral rights, the author may preserve those rights over certain aspects of the database.

Furthermore, the license does not limit the rights that the licensee or anyone else can have under any applicable law of using the database, such as exceptions to the database right or the right to extract and reutilize insubstantial parts of the database or exceptions to copyright infringement (fair dealing, fair use...).

As to the choice of law, the approach is analogous to the one described with regard to the PDDL (and indeed similar to the one followed in the CC licensing suite): the license is intended to take effect in and be governed by the laws of the jurisdiction in which the terms of the license are sought to be enforced. Moreover, whereas in the context of the relevant jurisdiction more rights are granted in the standard suite as to copyright and database right, then such additional rights are granted under the ODC-BY in order to meet the terms of the license itself.

4.2.1.4.3 The ODC Attribution and Share-Alike license (ODC-ODbL)

The ODbL²²¹ license represents the most articulated of the three licensing schemes offered by Open Data Commons.

²²¹ The text of the Human-Readable Summary and of the Full Text of the ODbL can be found, respectively, at the following links: http://opendatacommons.org/licenses/odbl/summary/ and

<http://opendatacommons.org/licenses/odbl/1.0/>.

Again, there are two formats available: a Human-Readable Summary of the document and a nine-pagelong Full License Text.

The ODbL is a license agreement aimed at granting users (as the ODC-BY) a worldwide, royalty-free, non-exclusive license to use the database for the duration of any applicable copyright and database rights, terminable only under the terms of the above-mentioned article 9 and explicitly allowing commercial exploitation.

The ODbL has one condition of use in common with the ODC-BY, namely the attribution requirement and the notices' obligations set by articles 4.2 and 4.3. Besides that, it presents one peculiar feature as to the conditions of use that can be considered the very core point of this license: the share-alike element. In fact, according to article 4.4 – similarly to the Creative Commons BY-SA – licensees are required to make public uses of any derivative database of the original database i) only under the terms of the ODbL, or, alternatively, ii) according to a later version of the same license – equivalent in the spirit to the original one – or iii) according to a (non-further-specified) compatible license.²²²

If the original database or a derivative database are incorporated in a collective database, the licensee is not required to apply the ODbL to license the collective database; indeed, coherently with the ODbL definitions, a collective database is not considered a derivative database. Nevertheless, the license still applies to the original database or to a derivative one as part of the collection.

Moreover, article 4.5 specifies that no derivative database – as such following under the terms of article 4.4 – is created by using the original database (also incorporated in a collective database) or a derivative database to create a produced work, defined in article 1 as 'a work (such as an image, audiovisual material, text, or sounds) resulting from using the whole or a Substantial part of the Contents (via a search or other query) from this Database, a Derivative Database, or this Database as part of the Collective Database'.

Additionally, regarding the use of a derivative database or a produced work from a derivative database, the user is required to offer to the recipients of the derivative database or produced work a machine-readable copy of i) the entire derivative database, or ii) a file with all the modifications applied to the database or the methods for carrying out such alterations, including any additional contents between the original database and the derivative database.²²³

Another relevant difference compared to the ODC-BY license is the presence of a specific provision, article 4.7, dedicated to technological measures and additional terms, which are – in principle – forbidden (letter a of article 4.7) and can only be imposed on the database, on the derivative database or on the whole or a substantial part of the contents (defined as a 'restricted database') in compliance with article 4.7, b). This latter provision – which admits a scheme resembling the one of 'dual-licensing' adopted for certain models of free software – indeed states that such restrictions are applicable only if a copy of the original or derivative database is made available to the recipient i) without additional fee, ii) in a medium (defined as an 'unrestricted database') that does not alter the terms of the license or limit the possibility of any person to enjoy such rights and iii) subject to the fact that the unrestricted database is at least as accessible to the recipient as the restricted database.

223 See art 4.6.

²²² Letter b) of art 4.4 provides that extraction or re-utilization of a substantial part of the contents of the database into a new database integrates the case of a derivative database, which must follow the requirements of this same section 4.4. Letter e) of the same provisions further sets forth that 'Licensors may authorize a proxy to determine compatible licenses under § 4.4 a), iii. If they do so, the authorized proxy's public statement of acceptance of a compatible license grants you permission to use the compatible license.'

As to the other general provisions (legal effect of the document, rights granted, moral rights, database exceptions and rights not affected, warranties and disclaimer, termination of the rights, conclusive general provisions), we find a substantial correspondence between the text of the ODbL and the text of the ODC-BY.

The scheme of the ODbL received significant criticism from Creative Commons for allegedly failing to achieve a number of goals that are key to the open data initiatives, such as the reduction of transaction costs, the simplification of the legal tools adopted and the provision of legal certainty to providers and users as to their rights and obligations.²²⁴

In fact, since the criteria for the protection of databases can vary significantly from country to country (e.g. 'sweat of the brow' theory in the US and sui generis database right's approach in the European Union), it can be very difficult to determine whether there are underlying intellectual property rights on the database and which specific nature (copyright or sui generis right) they have. Given that, it can be possible that neither the licensor nor the user will be able to reach a reasonable degree of certainty, respectively, over what they are licensing and over the necessity of accepting a license, as the latter is conditioned to the effective existence of underlying rights on the databases made publicly available.

Indeed, it can be argued that the structure of the ODbL and of its legal requirements – together with the considerable length of the document itself, around nine pages – appears too complex for non-lawyers to understand and interpret without the advice of an expert, thus resulting in increased transaction costs, plus the amplification of the gap between less expert and more sophisticated users.

Moreover, article 2.1 of the ODbL defines the document as an agreement in contract besides being a license. According to the on-going debate, this circumstance would be likely to cause uncertainty over the possibility, for information providers, to be granted an independent claim for breach of contract in addition to an infringement claim based on copyright law.²²⁵ Additionally, since the ODbL incorporates a share-alike element – providing that derivative works must be distributed under the terms of the same ODbL – problems can arise for users who want to combine data and works from different sources.

4.2.2 NATIONAL OPEN DATA LICENSING SCHEMES

Following the analysis of the main international open licensing models and of their compatibility with public sector data and databases, the attention will be now focused throughout the next paragraphs on the few national open licensing models launched in recent years to design a customized solution for the

²²⁴ See the wiki page: 'ODbL comments from Creative Commons', http://wiki.openstreetmap.org/wiki/ODbL comments from Creative Commons>.

^{225 &#}x27;However, in such cases, could the provider seek to enforce a provision of the ODbL, such as the share-alike provision, under a contract theory instead? And if it could do so, would that constitute an extension of protection beyond the scope intended by existing statutory schemes? For example, could data or databases that fail to qualify for copyright protection under U.S. law due to lack of the requisite level of creativity nevertheless be made subject to the share-alike provision in the U.S. under a contract theory? Could this be applied to individual data elements that are not themselves copyrightable—such as sensor readings or basic facts and ideas? Could European sui generis database rights be enforced against a U.S. user on the basis of the existence of a contractual relationship created by the ODbL?[...] If the ODbL functions in some cases as a contract, and not as a license, then what formalities must be observed in contract formation? Does the provider have to obtain agreement in the form of a "click-wrap" agreement, or would it be sufficient to have a notice of the license in its Web site terms of use? These are important questions for contract theories of enforcement, and it is unclear how the ODbL would interact with these issues when it is treated as a contract and not a license' (pp 4-5 of the wiki page).

management of public sector information and databases, either protected by copyright or by a *sui generis* right.

4.2.2.1 THE UK OPEN GOVERNMENT LICENSE (OGL)

The Open Government License (OGL) is a standard license provided within the UK Government Licensing Framework (UKGLF) and aimed at regulating the copyright and database rights on the PSI made available for re-use in the UK.

The UKGLF offers legal and policy guidance regarding the licensing solutions for the re-use of PSI. It set out a series of guiding principles about the licensing terms of PSI, such as clearness of expression, fairness, non-exclusivity, non-discrimination, transparency (through the publishing of standard license terms) and the need for attribution and acknowledgement of the sources.²²⁶

In particular, the UKGLF provides the two following licensing solutions: the Open Government License, allowing unrestricted use and re-use of PSI for all purposes, both commercial and non-commercial; and the Non-Commercial Government License, which limits the re-use to non-commercial purposes only.

The OGL, which is published on the National Archives website, ²²⁷ is a worldwide, royalty-free, perpetual, non-exclusive license aimed at allowing and regulating the re-use of UK public sector information and being the default license for a wide range of information protected by Crown copyright and Crown database rights across the UK public sector, as specified by the Controller of Her Majesty's Stationery Office (HMSO). ²²⁸ Furthermore, it covers any information that an information provider (meaning the person or organization providing the information under the license) or a right-owner offers for re-use under its terms.

The OGL document also clearly lists the categories of information that are exempted from the OGL licensing scheme, such as personal data in the information; information not disclosed or accessible under the existing access legislation; third-party rights that the information provider was not authorized to license; information covered by patents, trademark and design rights; and public sector logos, crests and the Royal Arms (when not part of a document or dataset), military insignia and identity documents.

As to the conditions of use, licensees are required to attribute the source of the information by providing any attribution statement indicated by the information provider, besides including – when possible – a link to the OGL.

The general provision dedicated to the absence of warranties clearly resembles the wording of the analogous provision contained in the CC and ODL licenses. In fact, the information is declared to be licensed 'as is', in a way that 'the information provider excludes all the representations, warranties, obligations and liabilities in relation to the information to the maximum extent permitted by law'. A

²²⁶ For an introduction on the UKGLF, see *UK Open Government Licensing Framework for public sector information*, edition 2.0, July 2011, delivered by the National Archives. Available at http://www.nationalarchives.gov.uk/documents/information-management/uk-government-licensing-framework.pdf>.

^{227 &}lt;a href="http://www.nationalarchives.gov.uk/doc/open-government-licence/">http://www.nationalarchives.gov.uk/doc/open-government-licence/>.

²²⁸ The HMSO manages Crown copyright and Crown database rights on behalf of the Queen. For further information on the scope of Crown copyright and Crown database rights, see section 3 of *UK Open Government Licensing Framework for public sector information* and paragraph 1.2.3.5 of the second chapter.

significant variation in the wording, if compared to the CC and ODL scheme, concerns the clause regulating the governing law. Indeed, whereas in CC and ODC licenses there is no choice of law – and the license terms are intended to take effect in and be governed by the laws of the jurisdiction in which the license terms are sought to be enforced – the OGL is governed by the laws of the jurisdiction in which the information provider has its principal place of business, unless the information provider requires differently.

A very interesting feature of the OGL is arguably represented by its interoperability with any Creative Commons Attribution License (CC-BY), covering copyright, and Open Data Commons Attribution License (ODC-BY), covering copyright, neighbouring rights and database rights on databases.

The UKGLF explicitly states that its default position is that PSI should be licensed free of charge²²⁹ under the terms of the OGL for commercial or non-commercial purposes.

Nevertheless, it recognizes that it can be necessary, in certain circumstances, to limit the re-use of such information to non-commercial purposes only. To satisfy this specific need, the Non-Commercial Government License was issued. This license is aimed at regulating those circumstances where the public sector is not able to release information to third parties for commercial re-use, for instance because of other contractual obligations or due to the type of information.

This license model covers only the information protected by Crown copyright, where the information provider was expressly delegated by the Controller of HSMO to license the information it produces and the information provider expressly offered to license specific information under the terms and conditions of the Non-Commercial Government License.²³⁰

4.2.2.2 THE FRENCH LICENCE OUVERTE (LO)

In February 2011, under the authority of the French Prime Minister and with the endorsement of the General Secretariat of Government, the Etalab mission²³¹ was started to set up an online platform for open data – data.gouv.fr – by the end of 2011. Etalab's mission is to create a single portal for collecting and making available public sector information of the state, of its branches and, should they be interested, local communities and bodies governed by public or private law when in charge of a public service.

Data.gouv.fr will provide free raw data in a reusable format and develop new online services for the benefit of citizens, starting from such data.

²²⁹ The UKGLF acknowledges that in certain circumstances charges can be reasonable. Given the scarce feasibility of providing model licenses for all charging situations, a series of guidelines was drafted to advise public sector bodies in the managing of licensing schemes involving charges, also based on the PSI and INSPIRE Directives' principles. See Annex B of UK Open Government Licensing Framework for public sector information.

²³⁰ As for the case of the standard OGL, where a public sector body makes information available under the Non-Commercial Government License, a visible statement must be applied and the license's URI (Uniform Resource Indicator) and URL (Uniform Resource Locator) should be provided in the information.

²³¹ Etalab is the task force established under the French Prime Minister's authority guiding the open Government Data Policy for France. For further information on the Etalab mission, see the webpage of the general secretariat of the government on the French government platform: http://www.gouvernement.fr/premier-ministre/le-secretariat-general-du-gouvernement/etalab> and also the Etalab blog: http://www.etalab.gouv.fr/>.

One of the key tasks of the Etalab mission was the drafting of an open content license for French public sector information, in collaboration with the Agence du Patrimoine Immateriel de l'Etat (APIE), the Conseil d'orientation de l'édition publique et de l'information administrative (COEPIA) and several other administrations.

In October 2011, the 1.0 version of the French Licence Ouverte (LO) was made available for public discussion. According to the terms of the LO, the re-user is granted a worldwide, free of charge, non-exclusive, personal right to use the 'information' produced and made available by the 'producer', where such information is defined as data or information proposed for re-use with the freedoms and under the conditions of the LO.²³³

In the context of the LO definitions, the 'intellectual property rights' on the information are briefly described as any rights identified as such by the French Intellectual Property Code, namely copyright, related rights and *sui generis* right over databases.

The LO provides that where the producer holds intellectual property rights over the re-usable information, such rights are assigned to the re-user on a non-exclusive, free of charge, worldwide basis and for the entire term of the intellectual property right.

The re-user is free to disseminate the information made available for re-use, by copying, reproducing, publishing and transmitting the information. The re-user is also free to use the information commercially and to build upon such information to create derivative information.

As a main condition for re-use, the licensee is required to attribute the information by giving credit to its source ('at least the name of the producer') and to indicate the date on which it was updated last time. This condition of re-use may be fulfilled by providing one or more hypertext links (URLs) indicating the source of the re-used information, provided, however, that the attribution does not suggest any official status or endorsement by the producer or any other public entity.

A relevant peculiarity, in comparison with the licensing schemes presented until now, is represented by the clause dedicated to the applicable law: whereas CC and ODC contain no choice of law, the LO explicitly identifies the French law as the law governing the license.

Compatibility is probably the most problematic aspect when dealing with national open data licenses. With regard to this issue, the LO reads that it 'has been designed to be compatible with any license which requires at least the attribution of the information'.

Therefore, the license is declared to be compatible with the Open Government License (OGL) elaborated within the UK Government Licensing Framework, the Creative Commons Attribution (CC-BY 2.0) and the Open Data Commons Attribution (ODC-BY) by the Open Knowledge Foundation.

²³² The 'producer' is defined as the entity which produces the 'information' and opens it to re-use under the freedoms and the conditions of this license.

²³³ The LO specifies that under French law, the following categories are not considered as PSI: 'information the communication of which is not a right under information access legislation; information contained in documents produced or received by public sector bodies exercising a public service of industrial or commercial character and information contained in documents over which third parties hold intellectual property rights'. Furthermore, information containing personal data is not considered re-usable PSI under the terms of French law, unless i) the persons to which the collected data pertain gave consent to such re-use, ii) the data have been made anonymous by the public bodies and iii) a legal or statutory provision allows its re-use, provided, nonetheless, that each of these hypotheses complies with the terms of French privacy protection legislation.

According to the wording of the license document, the LO is only compatible – within the CC set of licenses – with version 2.0 of CC-BY; however, it is not specified whether the LO is compatible with any national version of CC-BY 2.0 license or only with its general version.

The unported version of CC-BY 2.0 has no database-related provisions in its unported version; on the other hand, as explained before, European 2.0 CC licenses are not as homogeneous as European 3.0 versions: indeed, French 2.0 and 2.5 versions of CC licenses (together with Dutch, Belgian and German versions) specifically regulate the database right. This raises one significant question: did the French government try to solve the problem of distinguishing between original and non-original databases by making the LO compatible only with CC-BY 2.0 general, which does not contain any database right provision and therefore applies only to original and copyrighted databases? Or did it rather intend to make the LO compatible with any national version of CC-BY 2.0 (particularly with the French version), thus leaving a door open to the relicensing of a database covered by a *sui generis* right?

However, other classes of problems are likely to emerge in a cross-licensing process if we consider that the LO is also declared compatible with the UK OGL, which states its own compatibility with 'any Creative Commons Attribution license'.

Let us assume the French government licenses a non-original database of meteorological information (covered by *sui generis* right) under the LO. Based on this assumption, the following situations will be likely to take place:

- user A relicenses under CC-BY 2.0 such non-original database licensed under the LO and attributes the French government;
- another user B takes the first non-original database licensed under the LO and relicenses it under the UK OGL, attributing the French government;
- then user C relicenses under CC-BY 3.0 FR that non-original database licensed under the UK OGL, not attributing the French government. In avoiding the attribution to the French government, C is entitled to do so, since the database right (or, better, the attribution element regarding a database covered by the *sui generis* right) has been actually waived with the application of the CC-BY 3.0 license.

In conclusion, compatibility between LO and UK OGL is understandable from the perspective of avoiding a fragmentation of the open data movement, but undoubtedly raises a number of complex issues. In particular, it remains not entirely clear how the French government intended the term compatibility and whether it foresaw the possibility of losing the attribution as the original source of a non-original database in the course of the cross-licensing process.

4.2.2.3 THE ITALIAN OPEN DATA LICENSE (IODL)

In May 2011, in the context of the Italian Open Data initiatives carried out within the central public administration, a reviewed version of the Italian Open Data License (IODL) v1.0²³⁴ was released. The

²³⁴ The text of the IODL v1.0 is available at the following link: http://www.formez.it/iodl/>.

same license was first made available in October 2010 as a reference license for all the public sector bodies willing to make their data freely re-usable.²³⁵

The publication of the IODL v1.0 thus preceded the launch – in October 2011 – of data.gov.it, the Italian open data portal promoted by the Ministry for Public Administration and Simplification to enable access to the data of all Italian authorities, both at the national and at the local level.

Most of the data are published with Creative Commons licenses or with the Italian Open Data License v1.0 (and v2.0, that will be described further in the paragraph), depending on the choice made by the data owner.

The IODL v1.0 grants re-users a worldwide, perpetual, irrevocable, non-exclusive right to use – also commercially – the databases and the data made available, following the terms and conditions of the license. Moreover, the possibility of commercially re-using the information indeed represents the main innovation with respect to the first 2010 version.

The re-user is free to use the information by reproducing, distributing, communicating to the public, representing, including in collective works, extracting the information and creating a derivative work (included through mash-ups with other data).

In doing any of the above, the re-user is required to attribute the original source of the information and the name of the licensor, including – where possible – a copy of the license or a hypertext link to that license; to publish and share derivative works with the same license or with a license compatible to the IODL; and to avoid using the information in a way that could suggest the official character of such information or any endorsement by the licensor.

The IODL v1.0 is regulated by Italian law and the jurisdiction, in case any controversy arises, is attributed to the Court of Rome.

Contrary to the LO and UK OGL, the IODL v1.0 presents a viral element ('derivatives must be shared with the same IODL or with a compatible license'), which is likely to raise more complex interoperability problems compared to the other national open data licenses. Moreover, this element appears scarcely compatible with the idea of maximizing the opportunities of re-use for the PSI, since the share-alike clause has the undeniable effect of limiting the business opportunities of re-users who want to create value-added products and services (see paragraph 3.2.1.2).

According to the text of the IODL v1.0, the following are to be considered compatible licenses:

- the CC BY-SA (Attribution-ShareAlike), either in the international unported 3.0 (or subsequent) version or adapted to specific jurisdictions in the 2.5 (or subsequent) ported versions;
- the Open Data Commons, Open Database License (ODbL), 1.0 (or subsequent) version.

Furthermore, the presence of the share-alike feature excludes the possibility of making the IODL v1.0 compatible with the UK OGL and the LO, for such licensing schemes only require attribution without imposing a share-alike obligation.

The fact that the IODL v1.0 is declared compatible both with a CC-BY-SA 3.0 unported and a CC-BY-SA national 2.5 version seems to raise a number of issues of clearness and legal predictability, since the application of either one or the other of these CC licenses can lead to very different results as to the

²³⁵ The IODL was developed by FormezPA (http://www.formez.it/), a consultancy firm working for the modernization and implementation of innovation within the public administration.

management of the database right, especially if we consider that version 2.5 of CC licenses specifically regulates the *sui generis* right in a few jurisdictions.

Developing a scheme of examples similar to the one drafted with regard to the French LO makes the following cases possible:

- A non-original database (covered by *sui generis* right) is licensed under the IODL v1.0; then user A applies to the derivative works a CC-BY-SA 3.0 international unported license, which only covers collections of data that are protected by copyright (original databases) and does not consider the case of non-original databases covered by a *sui generis* right.
- A non-original database is licensed under the IODL v1.0; then user B applies to the derivative works a CC-BY-SA 2.5 Italy license, which does not regulate any database right.
- A non-original database is licensed under the IODL v1.0; then user C applies to the derivative works a CC-BY-SA 2.5 Netherlands, which also contemplates the licensing of the *sui generis* right. In this case then, there could also be further concerns regarding the expectations of licensor C applying a CC-BY-SA 2.5 Netherlands and expecting the database's derivatives to carry the share-alike feature and stay in the commons. Such expectations would indeed be disappointed in case of a subsequent application, by a user D, of CC-BY-SA 3.0 Netherlands, which states that the share-alike licensing restriction cannot be applied to a database protected on the ground of the *sui generis* right. Therefore, a user D would be theoretically authorized in avoiding attribution and the SA element.

Building on the experience gained until then with the IODL v1.0, after a phase of public discussion within the Italian open data community a new revised version of the same license, the IODL v2.0, ²³⁶ was presented and recently released in March 2012 as the new standard license for the national open data portal and other institutional open data websites.

Compared to the previous version, the main innovation of the IODL v2.0 concerns the conditions of use, that have been made less burdensome for users. Indeed, the SA element characterizing the IODL v1.0 has been removed and users are now simply required to attribute the source of the information and the name of the licensor, including, if possible, a copy of this license or a link to it. The IODL v2.0 appears therefore compatible with the all other open licenses containing at least a BY element. Furthermore, users should not use the information made available under the IODL v2.0 in a way that suggest approval or endorsement by the licensor. All the other clauses remained identical to those of the IODL v1.0; the Italian law is identified again as the governing law, but the indication of the court of Rome as the exclusive forum for any controversy arising out of the interpretation or application of the license has been eliminated.

4.2.2.4 THE NORWEGIAN OPEN DATA LICENSE (NODL)

At the beginning of 2011, the Norwegian Ministry of Government Administration and Reform published a draft version of a new Norwegian Open Data License (Norsk lisens for offentlige data,

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²³⁶ < http://www.dati.gov.it/iodl/2.0/>

NODL²³⁷), whose adoption is intended to be recommended to all Norwegian government agencies wishing to publish and make available their documents, covered by copyright and related rights, and their original and non-original databases.

The NODL is a non-exclusive, royalty-free license, without temporal or geographical limitations. The licensee is granted the right to utilize the information for any purpose, by copying, disseminating, modifying and combining the information with other sources and making available such derivative work.²³⁸

The licensee is required to attribute the source of the information as specified by the licensor, refer to the license and, where possible, insert a link to the text of the NODL.

Also in the NODL (article 7) we find the disclaimer clause that is typical of the CC and of the other custom licenses just introduced: the information is provided 'as is' and the licensor makes no warranties as to the contents and their timeliness. The licensor disclaims, to the extent permitted by law, any liability for errors and deficiencies in the information and its delivery.

A significant element of peculiarity of the NODL is represented by the distinction it provides with regard to the licenses to be deemed compatible with the terms and conditions of the same NODL:

- for all information (intended, according to the definitions' section, as the whole of creations protected by copyright and neighbouring rights including the database right), the compatible license corresponds to the Open Government License (version 1.0);
- for those parts of the information not constituting databases, Creative Commons Attribution License (generic version 1.0, 2.0, 2.5 and unported version 3.0) is deemed to be compatible;
- and, for those parts of the information that constitute databases, the compatible license is identified in the Open Data Commons Attribution License (version 1.0).

Such a distinction, identifying the specific categories of information subject to the licenses identified as 'compatible', appears arguably appreciable at first glance; in fact, it seems to avoid the confusion that often comes from the absence of a clear differentiation, within a license model, between original and non-original databases. But, on the other hand, as already observed, it is not always that easy for a common user to determine the type of underlying intellectual property rights (unless they have been clearly and correctly stated by the public authorities making the information available for re-use – which is also not obvious).

Moreover, even though the reference to the UK OGL is apparently appreciable in terms of transnational exchange of data, it must also be argued that such a provision actually also offers an effective evidence of the risks and uncertainties triggered by the increasing proliferation of national open data licenses: What about the other national open data licenses meanwhile released or scheduled for the future? Will the compatibility list of the NODL be integrated and updated accordingly? Or will these other national licenses be discriminated in terms of compatibility with the NODL? Would this

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²³⁷ The original text of the license can be found on the Norwegian open data portal. See http://data.norge.no/nlod/.
238 The NDOL identifies certain categories of information that are exempted from the scope of application of the license: personal information that is protected under the Data Protection Act, information that has been made available in breach of statutory duty of confidentiality, information covered by third-party rights that the licensor is not authorized to license; information that is protected by intellectual property rights other than copyright and related rights under the Copyright Act, chapter 5, such as trademarks, patents and design rights.

compatibility clause also operate if another country adopted for its own open data license the same identical terms of the OGL? Undoubtedly, these are not easy questions to answer.

As a further argument in favour of the need to look for a timely and unified solution to the issue of licensing proliferation, it must be stressed that the same observations hold true with reference to the French LO, which also identifies the OGL as a compatible license besides the international CC and ODC models.

Finally, with regard to the applicable law and jurisdiction, the NODL identifies the Norwegian law as the governing law and provides that the licensor may elect to bring claims in the jurisdiction where the intellectual property right enforcement is sought.

CONCLUSIONS

In the course of the present chapter we have explored the opportunity of both 'no rights reserved' and 'some rights reserved' solutions for the management of public sector databases, with special reference to the relevant provisions contained in the PSI Directive (mainly article 8).

In particular, no rights reserved solutions (especially through the PDM and CC0 tool) appear the most recommendable and coherent options – coherently with the PSI Directive's and open data movement's principles – every time the relevant data are fully or mostly unprotected.

On the other hand, for all those cases in which a license is deemed to be necessary for enabling the reuse of public collections of data – by clarifying the IP status of such information and by defining clearly the right and obligations of prospective re-users – then the adoption of standard licenses should be encouraged. In the context of the choice between international and national standard licenses, the former arguably seem to be the best candidates for addressing interoperability issues; nonetheless, as we have seen, a certain number of interoperability questions are also likely to come out within international licensing schemes such as CC (and, among other issues, especially in connection with the management of the *sui generis* right).

National standard licenses undoubtedly tried to address the specificities of the respective jurisdictions as to the re-use of public sector information and databases. However, as emerges quite clearly from the analysis of the national licenses presented throughout the previous paragraphs, they generally leave a number of concepts rather undetermined (especially as to interoperability and relicensing), and the results of mutual relicensing of databases under these licensing schemes can be complex. Therefore, such custom licenses are also likely to end up undermining and disrupting the unity of the initiatives dedicated to the enlargement and strengthening of the commons.

Given these premises, what could then be the most recommendable solution for harmonizing the current legal framework as to PSI licensing (and particularly as to the licensing of public sector databases)? Which legal tools could be adopted to maximize the pan-European (and worldwide) exchange of re-usable public databases?

To sum up, the most appropriate solution for achieving these goals – especially in the long run – seems to follow a twofold scheme.

Firstly, with regard to unprotected or mostly unprotected databases, the adoption of legal tools (such as the PDM and CC0) capable of clarifying and certifying the IPRs-free status of PSI data should be encouraged as much as possible.

On the other hand, the open data initiatives should converge as much as possible on the adaptation and adoption of standard international licenses, especially on those that have already been successfully adopted by a considerable number of countries and that have proven to be compatible with the need of making public content generally available and re-usable. In this perspective, the CC set of licenses seems to be a better candidate compared to the ODC licenses, since the latter deal exclusively with databases. Indeed, only the provision of a valid international standardized alternative can persuade national open data portals to abandon their national licensing scheme and move to a more international, harmonized and cross-licensing proof solution.

These ideal licenses should then be based on international definitions and be flexible enough to satisfactorily reply to the specificities of the different jurisdictions. Consequently, in the current context the main priority seems to be offering a licensing answer – within the CC model – for the management of the *sui generis* database right.

In conclusion, the provision of a more organic and complete licensing opportunity would enable the achievement of two main goals:

- i) Firstly, it would create a convergence in the world of international licensing schemes essentially CC and ODC towards a model that has already gained international recognition and that has the potential to fully embrace the entire spectrum of re-use of public sector information and databases, either copyrighted or covered by the *sui generis* right. In this perspective, such a reference model can arguably be represented, for the reasons stated above, by the CC model.
- ii) Secondly, offering a uniform licensing scheme (within the CC model) for the management of the *sui generis* right would make it possible to stop the proliferation of nationally based licenses and the potential danger they represent for a borderless European and worldwide effective re-use of public data by providing the various national open data initiatives with an international standardized solution to that very issue the management of databases that significantly influenced their decision to draft a national license.

5. CONCLUSIONS

The preliminary question addressed by this study was the issue of how the *sui generis* protection introduced by the Database Directive operates with regard to the collection of governmental data.

By applying the criteria expressed by the ECJ to the databases produced by public sector bodies, we concluded that, in a significant number of cases, state's databases are able to meet the formal requirements for the *sui generis* right to accrue. On the other hand, many collections of data will arguably remain excluded from protection, since the materials constituting the database are merely created – and not obtained from already existing sources – and the threshold of the substantial investment is not reached by further investing either in the obtaining, verification or presentation of such contents.

Furthermore, with regard to the possibility for public sector bodies to qualify as database producers, we saw that neither the wording of the Database Directive exclude such bodies from being database right-holders, nor do its national implementations – with the exception of the Dutch Database Act – treat private and public database producers differently.

Nonetheless, it remains rather questionable whether the database right, as a tool of economic incentive, was actually designed to grant public bodies the same level of protection recognized to private investors as database producers, considering the fact that the former satisfy the substantiality of the investment through taxpayers' money. However, what is absolutely undeniable is a significant difficulty, also for legally skilled people, in determining each time whether a certain database satisfies the requirements for protection and is thus covered by the *sui generis* right.

Such complexity arguably has the potential of adversely affecting the re-use opportunities of public data collections. In fact, the PSI Directive leaves PSI-holders' *sui generis* right unprejudiced and merely encourages such bodies to exercise their intellectual property rights in a way that facilitates re-use. In this regard, results prove that re-use can be severely undermined when administrative bodies are not certain about the subsistence or nature of their rights and users are left in the dark about the possibility and conditions of re-use.

In its provisions dedicated to licensing (which are not supposed to be involved in the review scheduled by 2013), the PSI Directive states that re-use can take place without any conditions or under certain conditions, where appropriate through licenses and preferably by resorting to standard licenses.

The study, therefore, analysed the standard licensing schemes currently available for PSI re-use, exploring the features of international models, such as Creative Commons (CC) and Open Data Commons (ODC), and examining the characters of a number of national licenses launched in the European context (UK, France, Italy and Norway) to foster the re-use of public data and address the peculiarity of the European *sui generis* right. In particular, the analysis focused on the attempt to identify a licensing model capable of maximizing the transnational exchange of re-usable data while regulating properly the specificities of a legal figure – the *sui generis* right – which is exclusively European.

Our conclusion is that governments should be encouraged to commit as much as possible to 'no rights reserved' solutions for those collections of data that are fully unprotected or towards which there is no significant interest for public bodies to assert their rights. In this connection, the Public Domain Mark

(PDM) and Creative Commons Zero (CC0) respectively represent the most recommendable tools to clearly state the opportunity of re-using freely and without condition certain public datasets.

On the other hand, for all those cases in which a license is deemed to be necessary for defining the rights and obligations of prospective re-users, the efforts of the open data initiatives should converge on the adoption and adaptation of standard international licenses, especially on those (particularly Creative Commons) that already gained widespread recognition as to their compatibility with PSI re-use regulations. In fact, although national licenses have the merit of providing a solution for enhancing the re-use of public data (also by managing the database right), they are also likely to raise interoperability issues and to make the re-use of data from different sources more complex for the users.

Indeed, only by providing a strong and effective international standardized alternative to open data initiatives could these be persuaded to abandon their national licensing scheme and to move to a more international, harmonized and interoperable solution.

Coherently with this view, offering a licensing answer – within the CC model – for the management of the *sui generis* database right appears as a current priority.

This would make it possible to achieve two main goals: Firstly, to create a convergence in the world of international licensing schemes – essentially Creative Commons and Open Data Commons – towards a model, Creative Commons, that has already gained international recognition for PSI re-use and that has the potential to fully embrace all categories of PSI, including database and data. Secondly, a regulation of the *sui generis* right within CC would create the conditions for stopping the proliferation of nationally based licenses (and the potential danger they represent for a harmonized transnational re-use of public data) by offering to the various national open data initiatives an international standardized solution to that very issue – the management of databases – that significantly influenced their decision to draft their own national license.

6. ANNEX

COMPARATIVE TABLE OF THE NATIONAL OPEN DATA LICENSES ANALYSED

National	Object	Compatibility	Governing
License			Law
OGL	PSI, including databases covered by Crown copyright and Crown database right	CC-BY (any version); ODC-BY	Laws of jurisdiction where information provider has principal place of business
L.O.	PSI, including databases covered by copyright or database right	Any license requiring at least Attribution; for instance: UK OGL; CC-BY 2.0; ODC-BY	French law
I.O.D.L.	PSI, including databases covered by copyright and database right	Any license requiring at least Attribution	Italian law
NODL	PSI, including databases covered by copyright or database right	For all PSI: OGL; For parts of PSI not constituting databases: CC BY (all unported versions); For parts of PSI constituting databases: ODC-BY	Norwegian law

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