FACTA UNIVERSITATIS
Series: **Law and Politics** Vol. 22, Nº 2, 2024, pp. 235-243
https://doi.org/10.22190/FULP240810020D

Review Paper

THE DATABASE DIRECTIVE IN THE LANDSCAPE OF MODERN DATABASES

UDC 341.24:004.6-022.59(4-672EU)
004:005

Albena Dobreva

Faculty of Law, University of National and World Economy, Republic of Bulgaria

ORCID iD: Albena Dobreva https://orcid.org/0000-0002-6877-2352

Abstract. *The digital fraternity of data and technology has changed the existing and driven new legal regulations worldwide. Announced as an original European contribution, the sui generis right to database protection will not apply to certain data after the entry into force of Article 43 of the Data Act (2023). The specifics of the legal protection of electronic databases are determined by their technical nature. This paper offers results establishing the need to review the applicability of the Database Directive (1996) to the new generation of databases in the information society. Whether and how the Database Directive fits into the modern data landscape and its legal framework is just as important a question as the answer to the expectations that it will contribute to the development of the information market of the European Union. The analysis based on the technical nature of specific databases and CJEU judgments the shows the relevance of the debate about the place of the Database Directive in the European Data Strategy, which is now dominated by the 'The big five" of EU's data legislation.*

Key words: *databases, sui generis right, CJEU judgments, recitals of technical nature.*

1. INTRODUCTION

The digital fraternity of data and technology has changed the existing and driven new legal regulations worldwide. The Data Act (2023)[1], which entered into force on 11 January 2024, and it will become applicable in September 2025, has become part of the strong legal framework of the EU proclaimed in the European Data Strategy (2020)[2]. Article 43 of the

Received August 10th, 2024/Revised September 13th, 2024/Accepted October 6th, 2024
Corresponding author: Albena Dobreva, PhD Candidate in Intellectuual Property Law, Department of Private Law, Faculty of Law, University of National and World Economy, Republic of Bulgaria, e-mail: albena.dobreva@unwe.bg
[1] EUR-Lex: Regulation (EU) 2023/2854 of the European Parliament and of the Council of 13 December 2023 on harmonised rules on fair access to and use of data and amending Regulation (EU) 2017/2394 and Directive (EU) 2020/1828 (Data Act), *Official Journal EU, L, 2023/2854, 22.12.2023, ELI:* http://data.europa.eu/eli/reg/2023/2854/oj.
[2] EC/European Commission (2020). The European Data Strategy: Shaping Europes' Digital Future, February 2020, EU https://ec.europa.eu/commission/presscorner/api/files/attachment/862109/European_data_strategy_en.pdf.

Data Act (2023) predictably limited the scope of the Database Directive (1996) [3] on the *sui generis* right where data is obtained from or generated by a connected product or related service falling within its scope and, in particular in relation to Articles 4 and 5 thereof**.** Considering that it is the *sui generis* right that is announced and perceived as an original European contribution, the question about the place of the Database Directive in the big picture is valid. With the Internet of Things being one of the main sources of data today, the following question becomes more and more relevant: is the Database Directive a legal artefact, and if not, where is its place and what is its role in the landscape of modern databases?

The specifics of the legal protection of electronic databases are determined by their technical nature, which significantly distinguishes them from literary works, which they are ranked among in international copyright law. The brief overview of the vision of databases as a building block of the so-called "information society" in parallel with the development of technologies can support the understanding of the problem. In the documents of the European Community, the terms "information society", "services of the information society", and "information market" stated being used at the beginning of the 1990s. Their importance was first brought out in the so-called White Paper on Growth, Competitiveness and Employment: The Challenges and Ways Forward into the 21st Century (1993)[4]. It is emphasized that "the emergence of a multimedia world (sound - text - image) represents a radical change comparable to the first industrial revolution..." (EC/European Commission, 1994a: 13). The Report on Europe and the Global Information Society: Recommendations of the high-level group on the information society to the European Council (known as the "Bangemann Report")[5] was requested by the European Council in December 1993 and published on 26 May 1994 to be discussed at the June 1994 high level European Council meeting in Corfu. The Report recommends that action be taken both at the European level and by Member States to adopt measures to put Europe in a profitably competitive position. One of them is the development of a common regulatory approach to create a competitive, pan-European market for information services (EC, 1994 b). The numerous subsequent political and legal documents on the subject prove that the aim is to achieve a strategic economic advantage: getting Europe back on track and staying on track, which means smart, sustainable and inclusive growth. As a result, in the EU, the Database Directive (1996)[6] obliged the member states to transpose it by 31 December1997.

In retrospect, it can be argued that it was multimedia that launched the global database market, which also necessitated their legal protection. Databases are an all-encompassing phenomenon in the current historical moment. What are the socio-economic prerequisites is an important question that needs to be asked before briefly answering the question: What is the usefulness of databases as an economic resource today? The short answer is: the

[3] Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases (The Database Directive), *OJ* L77/20, 27.3.1996; ELI: http://data.europa.eu/eli/dir/1996/9/oj; consolidated 06/06/2019.

[4] EC/Commission of the European Communities (1994a). White Paper on Growth, Competitiveness and Employment: the challenges and ways forward into the 21st Century, COM (93) 700 final, 5 Dec. 1993, Luxembourg. https://op.europa.eu/en/publication-detail/-/publication/4e6ecfb6-471e-4108-9c7d-90cb1c3096af/language-en

[5] EC/European Commission (1994 b).Bangemann report: Europe and the global information society (7 July 1994), https://cordis.europa.eu/article/id/2730-bangemann-report-europe-and-the-global-information-society

[6] Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases, (hereinafter: The Directive 96/9 and The Database Directive), published in OJ L 77, 27.3.1996, pp. 20–28.

information. When your home is on fire, information is the fire department phone number, while the phone book listing millions of names and numbers are just data. The more informative answer is: databases "create" new knowledge and, hence, "added value" to the data. In specialized technical literature, this is designated as “Knowledge discovery in databases” (KDD). Knowledge discovery in databases, as a data-driven technological process, has an ultimate goal: “extracting high-level knowledge from low-level data in the context of large data set” (Fayyad, Piatetsky-Shapiro, Smyth, 1996: 39). In other words, data can only be useful if new knowledge is extracted from it. This has always been the case, but the rapid development of information and communication technologies (ICT) means that the traditional manual selection and indexing of data no longer works. New data characteristics are emerging. Qualitative characteristics refer to the emergence of a new objective form of data in the digital form. The beginning of the digital era is associated with the year 2002, when humanity was able to store more information in digital than in analog format. The new digital quality of data leads to the emergence of new, diverse and advanced possibilities for processing, structuring and organizing data into models. New quantitative characteristics result from the qualitative ones, and lead to the accumulation of a huge, avalanche-like amount of data, which are infinite and impossible for human consciousness to perceive and process. In turn, the vast amount of data leads to the development and improvement of technologies for data operations. It is all aimed at improving the extraction of new knowledge, for the purpose of obtaining a competitive advantage (by discovering patterns, connections, forecasts, trends, regularities). According to the logic of the described spiral and ascending process, one moves relatively quickly from the traditional file-based approach to the "databases" approach, which eliminates the numerous files with their typical data redundancy. They are now managed either by specially written programs or by software called a database management system (DBMS). These changes occurred over the period from the establishment of the World Intellectual Property Organization (WIPO) in 1967, when databases were not explicitly mentioned, to the WTO 1995 TRIPS Agreement[7] and the WIPO Copyright Treaty[8] which provided copyright protection for databases and other compilations of data or other material.[9] This was also the time of transition from the hierarchical and network model to the second and third generation relational and object-oriented data model; it was the time when the heightened legal debate clarified the basic elements and legal understanding of electronic databases: a) data - the content of the data in the database provides this element; and b) intelligent data tool - a computer program specially written for a specific database (Pattison, 1992: 119).

The landscape of modern databases is already dictated by social networks, Internet of Things (IoT) sensors, GPS systems, satellite imagery, cloud technologies, big data from Google, Yahoo, Facebook, Twitter and now X. They have spawned a new phenomenon - big data, requiring a new generation of databases, including those working with semi-structured and self-describing data (NoSQL, distributed, geospatial, graph, JSON, XML, and others). This fourth generation of databases exceeds the capabilities of the previous

[7] WTO/World Trade Organisation (1994).The Agreement on Trade-Related Aspects of Intellectual Property Rights (The TRIPS Agreement, Annex 1C of the Marrakesh Agreement Establishing the WTO), adopted on 15 April 1994, Marrakesh, Morocco; https://www.wto.org/english/docs_e/legal_e/31bis_trips_01_e.htm

[8] WIPO/World Intellectual Property Organization (1996). WIPO Copyright Treaty (WCT), adopted on 20 December 1996, WIPO,Geneva, Switzerland; https://www.wipo.int/wipolex/en/text/295157

[9] Article 10 § 2 of the TRIPS Agreement, and Article 5 of the WIPO Copyright Treaty.

three, especially in terms of the volume of information stored. Relatively quickly, the descriptive empirical-factual stage in the development of database science has passed into the conceptual-theoretical one. It has contributed to the emergence of the Database Theory[10] which covers a wide range of issues related to the study and research of the theoretical and applied field of databases and database management systems. These include: database storage and management systems, database design and models, data structures, information retrieval, data access methods, data layout, query languages, database administration, data integration, database middleware, physical data models, data model extensions, application of relational algebra, the theory of finite models, fundamentals of concurrency control and database recovery, deductive databases, temporal and spatial databases, databases in real time. In the last decade, new research areas have been incorporated; data integration, data exchange, distributed query processing, incomplete and probabilistic data, tree-structured and graph data, thus expanding the subject area with "data management" questions in a broad sense. Frontier disciplines, such as machine learning and knowledge representation, are also studied; thus, they influence and are influenced by neighboring branches in computer science.[11]

Against this background, the analysis in this paper attempts to provide a non-traditional view of the problem of legal protection of databases. The discussion on the definition of databases in the Directive 96/9/EC is refracted through the prism of so-called "recitals of a technical nature". One of the goals of this study is to indicate, precisely through the complex view of the lawyer and the engineer, the need for an interdisciplinary approach to solving the existing problems, without denying what has been achieved.

2. DISCUSSION

When interpreting the intention of the Community legislature, the Court of Justice of the European Union (CJEU) concluded that the term “database” within the meaning of the Database Directive 96/9/EC has a "wide scope, unencumbered by recitals of a formal, technical or material nature"[12]. For example, recitals of a formal nature refer to the form of databases (electronic and non-electronic); the CJEU noted that the analog nature of topographic maps is not an obstacle to their qualification as databases.[13] Recitals of a material and formal nature may arise from the fact that the database may include literary, artistic, musical or other collections of works, as well as collections of other materials, such as texts, sound, images, numbers, facts, and data.[14] Recitals of a technical nature can objectively be conditioned by the diverse technical nature of the data and materials in the database and the means of their extraction from it. For example, the technical means of extracting each of these materials, such as "...electronic, electromagnetic or electro-optical processes or analogous processes..."[15] will be obviously different and conformable with the material collected in the database collection. The Court's reasons only hint what the Court

[10] Databasetheory.org (2024). Principles of Data Management; https://databasetheory.org/
[11] Databasetheory.org (2024). Principles of Data Management; https://databasetheory.org/
[12] CJEU cases: *Fixtures Marketing*, C-444/02, ECLI:EU:C:2004:697, par. 20; *Ryanair*, C-30/14, ECLI:EU:C:2015:10, par. 33; *Freistaat Bayern*, C-490/14, ECLI:EU:C:2015:735, par. 12.
[13] *Freistaat Bayern*, C-490/14, ECLI:EU:C:2015:735, par. 15.
[14] Recital 17 of the Preamble to the Directive 96/9/EC, and *Fixtures Marketing*, C444/02, EU:C:2004:697, par. 23.
[15] Recital 13 of the Preamble to the Directive 96/9/EC, and *Fixtures Marketing*, C 444/02, EU:C:2004: 697, par. 30.

means by "recitals of a technical nature" as opposed to "material" and "formal" ones, while the doctrine does not substantiate them.

This important question can be clarified through an interdisciplinary approach and a thorough study of the evolution of database technologies to their current state, prospects and legal reflection. In a humble attempt to cast more light on this issue, the next analysis aims to indicate what might be recitals of a "technical nature" in Directive 96/9/EC, how the CJEU interpreted this term, whether the CJEU interpretation is still relevant, and how significant all these issues are in terms of the landscape of modern databases in the information society.

The first task is to clarify the legal basis for the expression "recitals of a technical nature" within the scope of the term database in Directive 96/9/EC. First of all, the legal basis mainly derived from the recitals to the Preamble to the Database Directive, then from the main text, and finally from the case law. This is predictable given the fact that this Directive has 60 recitals. Thus, Recitals 9, 10 and 12 explain that the introduced legal protection aims to stimulate investment in advanced information processing systems against the background of their exponential growth in all sectors of activity. From Recital 12, it may be concluded that the *function* of databases is information storage and processing. Recital 13 states that information is in the form of "works, data or other materials which are arranged, stored and accessed by means which include electronic, electromagnetic or electro-optical processes or analogous processes".[16] In fact, Recital 13 provides a general list of technical methods for accessing data and materials. Article 1 § 2 of the Directive also stipulates that "database" implies "a collection of independent works, data or other material in the collection which are arranged in a systematic and methodical way and individually accessible by electronic or other means".[17] Recital 17 clarifies that 'the term "database" should be understood to include literary, artistic, musical or other collections of works or collections of other material such as texts, sound, images, numbers, facts, and data' (excluding independent audiovisual, cinematographic, literary or musical works).[18] Recital 23 and Article 2 (a) of the Directive specify that the term "database" shall not include "computer programs used in the making and operation of a database, which are protected by Council Directive 91/250/EEC of 14 May 1991 on legal protection of computer programs".[19] Recital 38 recognizes that the growing use of digital recording technology already allows database contents to be copied and rearranged electronically without the authorization of the database maker.[20] We can therefore conclude that by "technical recitals" in relation to the interpretation of the term "database" in Directive 96/9 the Community legislator understands those arising from the specific technical system, i.e. from the technology of storing and processing data, with the exception of computer programs for making and managing such technical systems and databases." This conclusion is very important as it is directly related to the present and future of the Directive 96/9/EC.

The second task is to trace whether the Court of Justice of the EU (CJEU) shares this conclusion in its judgments. When clarifying the content and scope of the term of "databases" and its protection within the meaning of the Directive 96/9/EC, in many of its judgments the CJEU refers to three recitals (Recitals 9, 10 and 12), which are always cited

[16] Recital 13 of the Preamble to the Directive 96/9/EC.
[17] Article 1, § 2 of the Directive 96/9/EC
[18] Recital 17 of the Preamble to the Directive 96/9/EC.
[19] Recital 23 of the Preamble to the Directive 96/9/EC.
[20] Recital 38 of the Preamble to the Directive 96/9/EC.

together.[21] Without going into detail, the Court also held that "the term “database” within the meaning of this Directive is more specifically defined in terms of its function".[22] In some of its decisions, the CJEU directly or indirectly confirms this conclusion. First of all, the Court expressly[23] or implicitly[24] qualifies the object of the contested right as databases within the meaning of the Directive (regardless of whether the particular database benefits from copyright or a *sui generis* right, if at all). Secondly, some technical characteristics of the databases that are subject to litigation can be deduced from the case materials and freely available sources. Thus, in the case *The British Horseracing Board and Others v William Hill Organization Ltd* (C-203/02)[25], the rights to a database containing diverse information on horse racing in the United Kingdom were at issue. On the technical side, it is an integrated, constantly updated electronic database which contains: diverse data on over one million horses of several generations and around 180,000 race records per year; details of registered owners, racing colors, registered trainers and registered jockeys; specific "pre-race information", all of which must be accurately stored and processed daily. The database has three main functions: 1) it registers information about owners, trainers, jockeys and horses, and records the horses’ performance in each race; 2) it serves to add weight and handicap to the horses entered for various races; 3) it compiles the lists of horses participating in races. Data is transmitted to subscribers by using Raw Data Feed ("RDF") technology. The database is publicly available on a website, includes "extensive computer software and hardware", and "consists of some 214 tables, containing over 20 million records".[26] From these sources, we can draw a conclusion about the database model. In this case, it is a relational model of databases with SQL:99 query language used.

The case *Football Dataco Ltd and Others v Yahoo! UK Ltd, and Others* (C-604/10)[27] contains a direct reference to “recitals of a technical nature” that would be relevant to the term “database”. According to the Court, the criterion of originality for copyright protection of databases is not met “when the setting up of the database is dictated by technical considerations, rules or constraints which leave no room for creative freedom”.[28] By analogy with the case *Bezpečnostní softwarová asociace v. Kaspersky Lab* (C-393/09)[29], the Court clarified that this is the case when the technical function can be achieved by a limited number of methods and, therefore, there is no room for original expression of the idea.[30] According to the CJEU, "recitals of a technical nature" are also the rules of the game in the case of sporting events because they leave no room for creative freedom in the sense of copyright, again by analogy with Joined cases C-403/08 and C-429/08, par. 98.[31] Without deviating much from the specific topic, we note that this interpretation of "recital of a technical nature" in terms of sports events is not undisputed and has been criticized in the literature.

---

[21] For more detail on “recital of technical nature” and examples, see: Dobreva, 2023: 379-382.
[22] *Fixtures Marketing Ltd*, C 444/02, EU:C:2004:697, par. 27.
[23] *Fixtures Marketing Ltd*, C-444/02, ECLI:EU:C:2004:697.
[24] *The British Horseracing Board and Others*, C-203/02, ECLI:EU:C:2004:695.
[25] *The British Horseracing Board and Others*, C-203/02, ECLI:EU:C:2004:695.
[26] The Opinion of Advocate General Stix-Hackl delivered on 8 June 2004, ECLI:EU:C:2004:333.
[27] *Football Dataco Ltd and Others v Yahoo! UK Ltd, and Others*, C-604/10, ECLI:EU:C:2012:115.
[28] *Football Dataco Ltd and Others v Yahoo! UK Ltd, and Others*, C-604/10, ECLI:EU:C:2012:115, par. 39.
[29] *Bezpečnostní softwarová asociace v. Kaspersky Lab,*C-393/09, ECLI:EU:C:2010:816,
[30] See: *Bezpečnostní softwarová asociace*, Case C-393/09, ECLI:EU:C:2010:816, paras. 48 и 49.
[31] *Football Association Premier League Ltd and Others v QC Leisure and Others* (C-403/08), and *Karen Murphy v Media Protection Services Ltd* (C-429/08), ECLI:EU:C:2011:631.

We come to the CJEU judgment in all-too-informative case, which comes a quarter of a century after the adoption of Directive 96/9/EC. The case *CV-Online Latvia SIA v Melons SIA* (C-762/19)[32] demonstrates the significant shift in database technologies. From the case materials (jurisdiction, opinion and judgment), it is clear that the plaintiff's database (*CV-Online Latvia SIA*) consists of current job advertisements, and is part of the plaintiff's website (www.CV.lv). Its content is annotated with specific machine-readable tags, known as "microdata", in HTML. Microdata are nested groups of the type name-value pairs and are added to documents alongside existing content so that they can be accessed by search engines and web robots. A valuable description and analysis of the technology stack used to create the website ("CV.lv") is available on the developer's website. MariaDB, PHP7, Python, Symfony, Elasticsearch, Scrapy, Redis, Nginx and RES together are a powerful set of tools providing the required individual accessibility, speed and timeliness of the job postings that make up the core of the database in question. The microservices-based software architecture is significantly more complicated than the previous case studies. Python is a flexible programming language, with an intuitive syntax, an extensive standard library, and a wide variety of external libraries that can be used to extend the functionality of the application. Symfony is one of the most popular PHP frameworks widely used for web-based applications. Scrapy is a Python framework for extracting data from external job posting portals known as sources. It enables retrieval of large amounts of data at near-real-time speeds. Replacing ordinary SQL queries to the database with a dedicated search engine meets the requirement for a fast, efficient and intuitive job search. Elasticsearch is preferred because of its ability to perform incremental data indexing. Manual work is avoided by an automatic mapping mechanism implemented. For geocoding, the Google API was used to convert a text address into geographic coordinates - a point on a map whose location is determined by using the point-to-polygon algorithm. Finally, MariaDB is a newer generation MySQL relational database management system (RDBMS), capable of managing large amounts of data organized into tens of thousands of tables and billions of rows of data.[33] Compared to relational databases in the case *The British Horseracing Board and Others* (C-203/02), for example, we are faced here with increasingly sophisticated and integrated technologies. In fact, "CV-Online Latvia SIA " made history with the fact that the database producer's right to demand the prevention of extraction and reuse of the databases is limited by additional conditions. In this case, however, there are still dormant recitals of a technical nature, which suggest thinking about the future of the Directive 96/9/EC; questions, decisions and arguments are addressed to national courts and stakeholders. A similar consideration, for example, is encrypted in note 23 of the Opinion of Advocate General Szpunar delivered on 14 January 2021.[34] Whether the meta-tags are part of the content of a database or vice versa is a "consideration for a technical nature" that may objectively lead to a corrective interpretation of the term "databases", namely, from the point of view of its function.[35] There is a clear implication that that technologies are advancing so quickly that databases can become an increasingly unrecognizable and an integral part of the overall technical solution (known in computer science as a "technological stack") outside of which they have no independent economic value.

---

[32] *CV-Online Latvia SIA v Melons SIA*, C- 762/19, ECLI:EU:C:2021:434.

[33] Arkbauer (n.d.). Building a Brand New Visidarbi.lv Job Portal and Aggregator, by Aivis Brodins CEO of CV-Online Latvia Ltd; https://arkbauer.com/portfolio/building-a-brand-new-visidarbi-lv-job-portal-and-aggregator/

[34] Opinion of Advocate General Szpunar delivered on 14 January 2021, C-762/19 "CV-Online Latvia" v SIA "Melons".

[35] For more on the problems with meta-search engines and databases, see: Husovec, 2014: 145.

3. CONCLUSION

Modern databases are created, maintained, stored, managed and retrieved with innovative and rapidly updating technologies. This makes them an increasingly integral part of the overall technical solution, which has become known in computer science as the "technology stack". The contradiction between the technological boom and an inadequate legal framework cannot benefit the society if the legislator rests in the comfort of outdated legal solutions. The exponential technological development in a short period of time urgently requires and must give rise to new adequate legal solutions in the field of databases, in addition to the existing ones or instead of them. Otherwise, they will not provide a fair solution to pressing problems and will not fulfill the declared objectives of the Database Directive 96/9/EC and the development of the information market within the Community. This is suggested by the two *ex-pos*t evaluations of the Database Directive 96/9/EC by the European Commission in December 2005 and April 2018.[36] If the third evaluation is carried out, it should finally bring the legal framework in line with developments in the field of databases, as required in the Final provisions of the Directive 96/9/EC.

REFERENCES

Dobreva, A. (2022). EU Databases: One Evaluation on Recitals through the Look of the Court. In: V. Bevanda (Ed.), *International Scientific-Business Conference – LIMEN 2022*, Vol. 8, Conference proceedings, pp. 377-383. Association of Economists and Managers of the Balkans; https://doi.org/10.31410/LIMEN.2022.377; https://limen-conference.com/wp-content/uploads/2023/07/LIMEN.2022.377.pdf

Dobreva, A. (2023). The Database Directive in the Landscape of Modern Databases, In: *Leadership, Innovation, Management and Economics: Integrated Politics of Research*, Book of Abstracts (p.66), ed. V.Bevanda) Ninth International Scientific-Business Conference LIMEN, 7 Dec. 2023, Graz University of Technology, Austria;; https://limen-conference.com/wp-content/uploads/2024/10/LIMEN_2023-BoA-WEB.pdf

Husovec, M. (2014). The End of (Meta) Search Engines in Europe?, *Chicago-Kent Journal of Intellectual Property*, 1, pp. 145-172. http://dx.doi.org/10.2139/ssrn.2411917

Fayyad, U.M., Piatetsky-Shapiro, G., Smyth, P. (1996). From Data Mining to Knowledge Discovery in Databases. *AI Magazine*, Vol.17, No.3,1996; pp. 37-54. DOI: https://doi.org/10.1609/aimag.v17i3.1230

Pattison, M. (1992). The European Commission's Proposal on the Protection of Computer Databases, *European Intellectual Property Review*, *14*(4), pp.113-120.

Legal Documents

EUR-Lex: Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases (The Database Directive), *Official Journal EC* L 77/20, 27.3.1996; ELI: http://data.europa.eu/eli/dir/1996/9/oj

EUR-Lex: Regulation (EU) 2023/2854 of the European Parliament and of the Council of 13 Dec. 2023 on harmonised rules on fair access to and use of data and amending Regulation (EU) 2017/2394 and Directive (EU) 2020/1828 (Data Act), *OJ EU, L* 2023/2854, 22.12.2023, *ELI:*http://data.europa.eu/eli/reg/2023/2854/oj

EC/European Commission (2020). The European Data Strategy: Shaping Europe's Digital Future, Feb. 2020, https://ec.europa.eu/commission/presscorner/api/files/attachment/862109/European_data_strategy_en.pdf

EC/European Commission (1994a). White Paper on Growth, Competitiveness and Employment: the challenges and ways forward into the 21st Century, COM(93) 700 final, 5 Dec. 1993, Luxembourg; https://op.europa.eu/en/publication-detail/-/publication/4e6ecfb6-471e-4108-9c7d-90cb1c3096af/language-en;

EC/European Commission (1994b). Bangemann report: Europe and the global information society (7.7. 1994), https://cordis.europa.eu/article/id/2730-bangemann-report-europe-and-the-global-information-society

[36] EP/European Parliament (2021). Revision of Directive 96/9/EC on the legal protection of databases, European Parliamentary Research Service, Ex-Post Evaluation Unit, PE 694.232,October 2021; Briefing by M-A. Huemer; https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/694232/EPRS_BRI(2021)694232_EN.pdf

EP/European Parliament (2021). Revision of Directive 96/9/EC on the legal protection of databases,European Parliamentary Research Service, Ex-Post Evaluation Unit, PE 694.232,October 2021; Brief M-A. Huemer; https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/694232/EPRS_BRI(2021)694232_EN.pdf

University of Pittsburgh (2004). Archive of European Integration: Growth, Competitiveness, Employment: The Challenges and Ways Forward into the 21st Century, White Paper, Part C: Contributions of the Member States. COM (93) 700 final/Part C, 5 December 1993; http://aei.pitt.edu/id/eprint/1140; https://aei.pitt.edu/1140/1/growth_wp_COM_93_700_Part_C.pdf

WIPO/World Intellectual Property Organization (1996). WIPO Copyright Treaty (WCT), adopted on 20 December 1996, WIPO,Geneva, Switzerland; https://www.wipo.int/wipolex/en/text/295157

WTO/World Trade Organization (1994). Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement), adopted on 15 April 1994, Marrakesh, Morocco; https://www.wto.org/english/docs_e/legal_e/31bis_trips_01_e.htm

Internet Sources

Arkbauer (n.d.). Building a Brand New Visidarbi.lv Job Portal and Aggregator, by A. Brodins CEO of CV-Online Latvia Ltd, https://arkbauer.com/portfolio/building-a-brand-new-visidarbi-lv-job-portal-and-aggregator/

Databasetheory.org (2024).Principles of Data Management; https://databasetheory.org/

Case law: CJEU database (n.d), https://curia.europa.eu/jcms/jcms/j_6/en/

Fixtures Marketing, C-444/02, ECLI:EU:C:2004:697; *Ryanair*, C-30/14, ECLI:EU:C:2015:10;
Freistaat Bayern, C-490/14, ECLI:EU:C:2015:735
The British Horseracing Board and Others, C-203/02, ECLI:EU:C:2004:695.
Football Dataco Ltd and Others v Yahoo! UK Ltd, and Others, C-604/10, ECLI:EU:C:2012:115.
*Bezpečnostní softwarová asociace v. Kaspersky Lab,*C-393/09, ECLI:EU:C:2010:816,
Football Association Premier League Ltd and Others v QC Leisure and Others (C-403/08), and
Karen Murphy v Media Protection Services Ltd (C-429/08), ECLI:EU:C:2011:631.
CV-Online Latvia SIA v Melons SIA, C- 762/19, ECLI:EU:C:2021:434.
Opinion of Advocate General Stix-Hackl delivered on 8 June 2004, ECLI:EU:C:2004:333.
Opinion of Advocate General Szpunar delivered on 14 Jan. 2021, C-762/19 *CV-Online Latvia v SIA Melons.*

DIREKTIVA 96/9/EZ O ZAŠTITI BAZA PODATAKA U KONTEKSTU SAVREMENIH BAZA PODATAKA

Digitalna priroda podataka i tehnologije promenila je postojeće i inicirala usvajanje novih zakonskih propisa širom sveta. Najavljeno kao autentični evropski doprinos zaštiti podataka, sui generis pravo na zaštitu baza podataka neće se primenjivati na određene podatke nakon stupanja na snagu Uredbe (EU) 2023/2854 o usklađenim pravilima za pravičan pristup i upotrebu podataka. Specifičnosti pravne zaštite elektronskih baza podataka određene su njihovom tehničkom prirodom. Rezultati ove analize ukazuju na potrebu da se preispita primenljivost Direktive 96/9/EZ o zaštiti baza podataka na novu generaciju baza podataka u savremenom informacionom društvu. Da li se i na koji način Direktiva 96/9/EZ uklapa u savremeni pejzaž podataka i novi pravni okvir jednako je važno pitanje kao i odgovor na očekivanja da će ona doprineti razvoju informacionog tržišta Evropske unije. Analiza tehničke prirode konkretnih baza podataka i presuda Evropskog suda pravde ukazuje na relevantnost debate o mestu Direktive 96/9/EZ u Evropskoj strategiji o zaštiti podataka (2020), koja sada počiva na pet „velikih" pravnih akata EU o zaštiti podataka.

Ključne reči: *baze podataka, pravo sui generis, presude Suda pravde EU, uvodne odredbe tehničke prirode.*