

Dr. Martin Jaschinski ¹
Sebastian Biere ¹
Oliver Brexl ¹
Thorsten Feldmann, LL.M. ²
Dr. Till Jaeger ²
Thomas Nuthmann ¹
Julian Höppner, LL.M. ³
Dr. Lina Böcker
Robert Weist
Marie Lenz, LL.M.
Dr. Ansgar Koreng ²
Martin Michel
Dr. Jeannette Viniol, LL.M.
Nadine Schawe

¹ Fachanwalt für gewerblichen Rechtsschutz
² Fachanwalt für Urheber- und Medienrecht
³ Fachanwalt für Informationstechnologierecht

Legal Opinion – Legal Aspects of European Electricity Data

by *Dr. Till Jaeger*, Certified Copyright and Media Law Attorney

Christinenstraße 18/19
10119 Berlin

Tel. + 49 30 443 765 0
Fax + 49 30 443 765 22

Mail jaeger@jbb.de
Web www.jbb.de

Sitz der Partnerschaftsgesellschaft: Berlin
Registergericht: AG Charlottenburg, PR 609 B

Berliner Volksbank
IBAN DE96 1009 0000 5205 2220 08
BIC BEVODEBBXXX

Table of Contents

I.	Preface and Use Cases	4
II.	Legal Background	7
1.	Statutory Requirements for the Publication of Electricity Data.....	7
a)	European Law	7
b)	German Law.....	11
2.	Legal Protection of Databases under Copyright Law.....	12
a)	Copyright Protection of Databases.....	13
b)	Electricity Data protected as a Database	14
c)	Limitations on the Protection of the <i>sui generis</i> right.....	18
3.	Relationship between Transparency Obligations and Database Rights.....	19
III.	Reuse of Electricity Data – Use Cases	20
1.	Downloading Data from a public accessible Data Platform	21
a)	Necessary Rights for downloading Electricity Data	21
b)	Applicable Limitations on the <i>sui generis</i> right.....	22
c)	License Grant for Reuse of Electricity Data.....	23
2.	Sending downloaded Data to a Colleague.....	31
a)	Necessary Rights for Forwarding Electricity Data	32
b)	Applicable Limitations on the <i>sui generis</i> right.....	32
c)	License Grant for Reuse of Electricity Data.....	33
3.	Putting downloaded Data on an internal Network Drive.....	34
a)	Necessary Rights for putting downloaded Data on an internal Network Drive.....	34
b)	Applicable Limitations on the <i>sui generis</i> right.....	37
c)	License grant for Reuse of Electricity Data	37

4. Using Data as Input to a Computer Model and publishing the Model Results	38
a) Necessary Rights for using Data as input to a Computer Model and publishing the Model Results	38
b) Applicable Limitations on the <i>sui generis</i> right.....	38
c) License grant for reuse of Electricity Data	39
5. Modifying Electricity Data	40
a) Necessary rights for modifying electricity data	40
b) Applicable Limitations on the <i>sui generis</i> right.....	40
c) License grant for reuse of Electricity Data	41
6. Putting Electricity Data on a Website for Download.....	41
a) Necessary rights for modifying Electricity Data.....	41
b) Applicable limitations on the <i>sui generis</i> right.....	41
c) License grant for reuse of Electricity Data	42
IV. De lege ferenda – Legislation to come to improve the Situation for the Reuse of Data.....	43
1. Amendments to the German Copyright Act	43
2. Proposal for a Directive on Copyright in the Digital Single Market .	45
V. Appropriate Licensing for legally reliable Reuse of Electricity Data	47
1. Open Data Licensing	48
2. Provisions in Consortium Agreements	49
3. Requirements in Funding Decisions.....	50

I. Preface and Use Cases

This legal opinion addresses the legal situation of the reuse¹ of data in both the European and Germany electricity markets. In particular, we focus on such data that is covered by transparency regulation.

Transparency regulation on the national and European level in the field of electricity markets requires the establishment of transparency platforms and the publication of data. For example, the central information transparency platform on the European level (“ENTSO-E”) shall be available to the public free of charge through the internet and the data shall be up to date, easily accessible, downloadable and available for at least five years.

As a consequence to the legal requirements to transparency in the field of the electricity markets the stakeholders in this market shall receive fundamental information of the functioning and shall, among others, increase the security of electricity supplies.² Electricity data comprises many different types of data, for example the following:

- The forecasted and actual consumption of electricity, possibly in fine temporal granularity such as quarter-hours³
- The actual generation electricity per technology or fuel⁴
- Installed generation capacity according to each country and production type⁵
- Installed capacity and technical parameters by each power station
- Day-ahead and intraday prices

¹ In this context, “reuse” means any activity to copy, modify, publish or distribute energy data or communicate the data to the public subsequently to the publication by the data provider.

² See Recital 4 of Regulation (EU) No 543/2013

³ <https://transparency.entsoe.eu/load-domain/r2/totalLoadR2/show>

⁴ <https://transparency.entsoe.eu/generation/r2/actualGenerationPerProductionType/show>

⁵ <https://transparency.entsoe.eu/generation/r2/installedGenerationCapacityAggregation/show>

Market participants and researchers use these data usually not by mere inspection, but in computer-based analyses. The data provided by data owners can be aggregated, used as input for computer models and analyzed in many ways for scientific and commercial purposes. In the following, all these usages based on data that is published for transparency purposes are referred to as “reuse of data”.

Reuse of data may have a wide range of advantages: using Electricity data is of tremendous importance for market actors and system operators as well as for policy and research. Short-term and mid-term production planning as well as investment decisions by utility companies are based on computer models that require large amounts of electricity data. Similar computer models are used for wholesale trading on power exchanges. Transmission system operators require data for short-term and real-time operation of the transmission grid as well as long-term planning of grid expansion. Researchers, consultants and policy advisers use data-intensive computer models for everything from policy evaluation to long-term scenario-based policy design.

Against this background, we have identified the following use cases for the reuse of energy data for further legal analysis:

1. Downloading data from a public accessible data platform for private reasons and taking a look at it
2. Downloading data from a public accessible data platform for professional purposes (commercial use within a company and research at university)
3. Sending downloaded data to a colleague, member of the same team
4. Sending downloaded data to a colleague from another university or company
5. Putting downloaded data on an internal network drive or database in order to share it with colleagues
6. Downloading data and using it privately in a visualization app (e.g., showing yesterday’s evolution of load and wind power generation)

7. Downloading data and using it commercially in a visualization app (e.g., showing yesterday's evolution of load and wind power generation) and selling the app
8. Using data as input to a computer model and publishing the model results
9. Publishing downloaded data along with research results in an academic journal that requires publication of data and models
10. Using data as input to a computer model and selling the data-model package including the data
11. Modifying data (e.g., re-scale) and sharing with a colleague in the same company or university
12. Downloading data and putting it on a website for free, along with other free-of-charge data
13. Downloading data, modifying it (e.g., re-scale), and putting it on a website for free
14. Downloading data, modifying it (e.g., re-scale), and putting it on a website under an open data license, such as Creative Commons

The question in focus is whether these activities are allowed and under which conditions this is the case.

As typical examples we refer to the following data sources and its licensing conditions:

- ENTSO-E Transparency Platform (as of 1 May 2017)
- Eurostat
- List of power plants of Germany's Bundesnetzagentur (BNetzA)
- List of power plants Germany's Umweltbundesamt (UBA)

First, we describe the legal background of the statutory requirements for the publication of electricity data in the EU and in Germany as well as the protection of data under copyright law (II.). Following, we provide an analysis whether the activities described in the uses cases are permitted under applicable law (III.). Finally, we take a closer look at current legislative projects

which might change the legal situation (IV.) and provide guidance how to create legal certainty by appropriate licensing and provisions in multilateral agreements (V.).

II. Legal Background

In order to clarify the legal background of the reuse of electricity data we summarise the statutory requirements for the publication of electricity data in the EU and Germany on the one hand (1.) and describe the legal protection of databases and which exceptions exist (2.). Subsequently, we reflect upon the relationship of transparency obligations and copyright protection in the field of electricity data.

1. Statutory Requirements for the Publication of Electricity Data

Statutory requirements for the publication of data exist on the national and international level.

a) European Law

The legislative basis on transparency in the electricity market in the EU consists of the following legal acts:

- Regulation (EC) No 714/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation (EC) No 1228/2003⁶
- Regulation (EU) No 1227/2011 of the European Parliament and of the Council of 25 October 2011 on wholesale electricity market integrity and transparency⁷

⁶ <http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32009R0714>

⁷ <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32011R1227>

- Commission Regulation (EU) No 543/2013 of 14 June 2013 on submission and publication of data in electricity markets and amending Annex I to Regulation (EC) No 714/2009 of the European Parliament and of the Council⁸

aa) Regulation (EC) No 714/2009

Regulation (EC) No 714/2009 lays down requirements for Transmission System Operators (TSOs) to publish data on the availability of networks, capacities of cross-border interconnectors and generation, load and network outages. Article 15 of Regulation (EC) No 714/2009 reads as follows:

“Provision of information

- 1. Transmission system operators shall put in place coordination and information exchange mechanisms to ensure the security of the networks in the context of congestion management.*
- 2. The safety, operational and planning standards used by transmission system operators shall be made public⁹. The information published shall include a general scheme for the calculation of the total transfer capacity and the transmission reliability margin based upon the electrical and physical features of the network. Such schemes shall be subject to the approval of the regulatory authorities.*
- 3. Transmission system operators shall publish estimates of available transfer capacity for each day, indicating any available transfer capacity already reserved. Those publications shall be made at specified intervals before the day of transport and shall include, in any event, week-ahead and month-ahead estimates, as well as a quantitative indication of the expected reliability of the available capacity.*

⁸ <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32013R0543>

⁹ Underlining by the author of this legal opinion.

4. Transmission system operators shall publish relevant data on aggregated forecast and actual demand, on availability and actual use of generation and load assets, on availability and use of the networks and interconnections, and on balancing power and reserve capacity. For availability and actual use of small generation and load units, aggregated estimate data may be used.

5. The market participants concerned shall provide the transmission system operators with the relevant data.

6. Generation undertakings which own or operate generation assets, where at least one generation asset has an installed capacity of at least 250 MW, shall keep at the disposal of the national regulatory authority, the national competition authority and the Commission, for five years all hourly data per plant that is necessary to verify all operational dispatching decisions and the bidding behaviour at power exchanges, interconnection auctions, reserve markets and over-the-counter-markets. The per-plant and per hour information to be stored shall include, but shall not be limited to, data on available generation capacity and committed reserves, including allocation of those committed reserves on a per-plant level, at the times the bidding is carried out and when production takes place.”

bb) Regulation (EU) No 1227/2011

Additionally, Art. 4 of the Regulation (EU) No 1227/2011 recognizes that publication of inside information:

“Article 4

Obligation to publish inside information

1. Market participants shall publicly disclose in an effective and timely manner inside information which they possess in respect of business or

facilities which the market participant concerned, or its parent undertaking or related undertaking, owns or controls or for whose operational matters that market participant or undertaking is responsible, either in whole or in part. Such disclosure shall include information relevant to the capacity and use of facilities for production, storage, consumption or transmission of electricity or natural gas or related to the capacity and use of LNG facilities, including planned or unplanned unavailability of these facilities.

2. ...

3.

4. *The publication of inside information, including in aggregated form, in accordance with Regulation (EC) No 714/2009 or (EC) No 715/2009, or guidelines and network codes adopted pursuant to those Regulations constitutes simultaneous, complete and effective public disclosure.*

cc) Commission Regulation (EU) No 543/2013

Finally and according to the Commission Regulation (EU) No 543/2013 a central information transparency platform has been established and is operating within the European Network of Transmission System Operators for Electricity (hereinafter referred as "ENTSO-E"). This Regulation lays down the minimum common set of data relating to generation, transportation and consumption of electricity to be made available to market participants. It also provides for a central collection and publication of the data. The European Network of Transmission System Operators for Electricity is established as a central information transparency platform. The ENTSO-E shall publish on the central information transparency platform all data which Transmission System Operators are required to submit to the ENTSO-E.

However, the aforementioned regulations do not contain any explicit stipulations about the reuse of published electricity data. They regulate *what in-*

formation has to be published and in which form but there are no requirements which rights of use have to be granted to the stakeholders of the electricity market or the general public accordingly.

b) German Law

The German Renewable Energies Act from 2017 (EEG 2017)¹⁰ stipulates in its part 5:

“Transparency

Division 1

Obligations to communicate and publish information

Section 70

Principle

Installation operators, grid system operators and electricity suppliers must provide to one another without delay the data required for the nationwide equalisation pursuant to Sections 56 to 62, and particularly the data cited in Sections 71 to 74. Section 62 shall be applied mutatis mutandis.

Section 71

Installation operators

Installation operators must provide the grid system operator with

- 1. all the necessary data for the final invoicing of the preceding calendar year by 28 February of a year for each installation,*
- 2. information as to whether and to what extent, for the electricity generated in the installation, ...*

Section 77

Information to be provided to the public

¹⁰ English version available at http://www.bmwi.de/Redaktion/EN/Downloads/E/eeg-2017-gesetz-en.pdf?__blob=publicationFile&v=3, German version available at http://www.gesetze-im-internet.de/eeg_2014/

(1) Transmission system operators must publish on their websites:

1. the information pursuant to Sections 70 to 74 immediately following their transmission and
2. a report on the determining of the data transmitted by them pursuant to Sections 70 to 74 without delay after 30 September of a year.

Only the post code and the municipal code shall be cited for the location of installations with a maximum installed capacity of 30 kilowatts. They must retain the information and the report until the end of the following year. This shall be without prejudice to Section 73 subsection 1.

(2) The transmission system operators must publish the payments pursuant to Section 57 subsection 1 and sold quantities of electricity pursuant to Section 59 and the information pursuant to Section 72 subsection 1 number 1 letter c in line with the Renewable Energy Sources Ordinance on a joint website in non-personal form.

(3) The information and the report must enable a qualified third party to fully understand the payments and the commercially purchased quantities of electricity without further information.

(4) Information which is published online in the register does not have to be published by the grid system operators."

As on European level, EEC 2017 regulates *what* information has to be published and in which form but there are no requirements which rights of use have to be granted to the stakeholders of the electricity market or the general public accordingly.

2. Legal Protection of Databases under Copyright Law

Hereinafter, we describe the legal protection of databases (a) and its limitations (b) in general and provide an analysis whether electricity data published on transparency platforms is protected as a database under copyright law (c).

a) Copyright Protection of Databases

The “Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases”¹¹ contains the statutory framework for the protection of databases. The protection is twofold:

- Databases which, by reason of the selection or arrangement of their contents, constitute the author's own intellectual creation shall be protected as such by copyright (Article 3).
- Independently, Member States shall provide for a right for the maker of a database which shows that there has been qualitatively and/or quantitatively a substantial investment in either the obtaining, verification or presentation of the contents to prevent extraction and/or re-utilization of the whole or of a substantial part, evaluated qualitatively and/or quantitatively, of the contents of that database (Article 7).

In the field of electricity data transparency regulation specifies which data has to be selected for publication and how to arrange it. Thus, there is little scope left for data providers for an own intellectual creation resulting in classical copyright protection. Accordingly, for the purpose of this legal opinion we do not assume any copyright protection of electricity data under Article 3 of Directive 96/9/EC or Section 4 (2) of the German Copyright Act.

The Directive 96/9/EC established in its Article 7 a so called “*sui generis* database right” which was newly introduced at that time and which does not exist in other jurisdictions outside the European Union. The *sui generis* database right is similar to copyright but is not granted for an intellectual creation but for the financial and professional investment made in obtaining and collection the contents.¹² German law makers have adopted the *sui generis* database right in Section 87a ff. German Copyright Act.

¹¹ <http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:31996L0009>

¹² Recital 39 of Directive 96/9/EC

According to Article 1 Directive 96/9/EC and Section 87a (1) 1 German Copyright Act a *database* shall mean a “*collection of independent works, data or other materials arranged in a systematic or methodical way and individually accessible by electronic or other means*”.¹³ Additionally, and to be subject to legal protection there has been qualitatively and/or quantitatively a substantial investment of the maker of a database in either the obtaining, verification or presentation of the contents.

Thus, the protection does not cover a single data but certain collections of data to a database. Furthermore, the software to manage a database is a separate subject matter of copyright protection (as a computer program) und does not fall under the scope of the *sui generis* database right.

To determine whether a database is protected by the “*Sui generis* Database right” the following requirements need to be met:

- Existence of a „collection“
- Subject of the collection are „data or other independent elements “
- The data needs to be „arranged in a systematic or methodical way“
- The data needs to be „individually accessible“
- There has been “qualitatively and/or quantitatively a substantial investment of the maker of a database in either the obtaining, verification or presentation of the contents“

Accordingly, we have analyzed these five criteria with regard to typical electricity data as required to be published at ENTSO-E and German transparency platforms (see examples above).

b) Electricity Data protected as a Database

aa) Collection

¹³ English version of the German Copyright Act available at http://www.gesetze-im-internet.de/englisch_urhg/index.html

Neither the German Copyright Act nor the Directive 96/9/EC contain a definition of what is considered a “collection” of data. Courts provide examples but have not defined the boundaries of the term.

Mostly, it is required that there is an “*intention to collect data*” and the factual “*bringing together*” of data.¹⁴ According to Art. 1 of the Regulation 543/2013 the regulation „*provides for a central collection and publication of the data*”. Thus, information about the total load of electricity consumption in various countries, the generation of electricity per production type (Biomass, fossil brown coal, gas etc), installed capacity per production type and many other information as well is collected and the results are therefore and without doubt a “collection” of data.

bb) Data or Independent Elements

Electricity data is stored as electronic information and the collections consist therefore of classical data in the meaning of the Directive 96/9/EC.

cc) Arranged in a Systematic or Methodical Way

An arrangement in a *systematic* way requires predefined logical and objective criteria. An arrangement in a *methodical* way requires a certain purpose of the planned structuring. Typical examples are the alphabetical or chronological arrangement.¹⁵

The regulation on submission and publication of data in electricity markets provides clear specifications how to structure the electricity data. A good example is Art. 7 of Regulation (EU) No 543/2013 with regard to information relating to the unavailability of consumption units. The information is structured in :

¹⁴ See Dreier/Schulze-Dreier, UrhG, 4. Aufl., § 87a, para 4.

¹⁵ See BGH GRUR 2011, 724, 725 – *Zweite Zahnarztmeinung II*

- bidding zone,
- available capacity per market time unit during the event,
- reason for the unavailability,
- the estimated start and end date (day, hour) of the change in availability;

For the avoidance of doubt, we want to emphasize that the systematic or methodical arrangement does not need to be creative. Even simple structuring as an alphabetical order suffices. The required publication of electricity data on transparency platforms as ENTSO-E is structured in a systematic way and meets the criterion of the definition of a database.

dd) Individually accessible Data

The criterion of “*individually accessible data*” is interpreted in a broad way,¹⁶ although it is not entirely clear what are the concrete requirements for it. Nevertheless, the criterion is satisfied in any event if any single information can be accessed and/or researched by electronic means as a search engine.

The information published by ENTSO-E is individually accessible and the requirement is met. Even if not all information is individually accessible the accessible parts of the collection of data would be considered a database.

ee) Substantial Investment

Article 7(1) Directive 96/9/EC provides for specific protection, called a *sui generis* right, for the maker of a database within the meaning of Article 1(2) of the directive, provided that it “*shows that there has been qualitatively and/or quantitatively a substantial investment in either the obtaining, verification or presentation of the contents*”.

¹⁶ Dreier/Schulze-Dreier, UrhG, 4. Aufl., § 87a, para 8.

The investment does not need to be a financial one but may consist of labour or technical resources.¹⁷ However, the investment must refer to the obtaining, verification or presentation of the contents of a database whereas the creation of the data itself has to be disregarded. Hence, the European Court of Justice ruled in *British Horseracing Board*:

„The expression ‘investment in ... the obtaining ... of the contents’ of a database in Article 7(1) of the directive must be understood to refer to the resources used to seek out existing independent materials and collect them in the database. It does not cover the resources used for the creation of materials which make up the contents of a database.“ (European Court of Justice, 09.11.2004 - C-203/02 – *British Horseracing Board*).

When examining whether here there has been qualitatively and/or quantitatively a substantial investment the creation of the data has not to be taken into account. Most of the electricity data is created during the operation of transmission system operators and power plant operators. Accordingly, any investment made later to the creation which is necessary for the obtaining, verification or presentation of the contents within a database has to be taken into account (e.g. running a platform to publish the data, technical investment to structure the content and to make it easily accessible etc.).

Against this background, it is a case-by-case decision whether a substantial investment has been made into a collection of electricity data. For those who want to reuse the published data it is usually not apparent if the data provider has made a substantial investment (e.g. which resources have been used with a view to ensuring the reliability of the information contained in that database, to monitor the accuracy of the materials collected when the database was created and during its operation) and, hence, the database is protected by the *sui generis* right.

¹⁷ See BGH GRUR 2011, 724, 725 – *Zweite Zahnarztmeinung II*.

Up to now, the Federal Court of Germany was quite liberal in assessing a substantial investment and accepted any “not entirely insignificant, from anyone easily to render investments.”¹⁸ In the decision *Zweite Zahnarztmeinung II* the Federal Court of Germany considered the amount of EUR 4.000,- for obtaining, maintenance and further development of the database management software as well as the verification of 3.500 valuations as sufficient.

Thus, any person who wants to reuse a database with electricity data has to assume that the database is protected by copyright, i.e. the *sui generis* database right according to Article 7 of the Directive 96/9/EC.

c) Limitations on the Protection of the *sui generis* right

Article 9 of the Directive 96/9/EC allows member states to stipulate limitations on the *sui generis* database right:

“Exceptions to the sui generis right

Member States may stipulate that lawful users of a database which is made available to the public in whatever manner may, without the authorization of its maker, extract or re-utilize a substantial part of its contents:

(a) in the case of extraction for private purposes of the contents of a non-electronic database;

(b) in the case of extraction for the purposes of illustration for teaching or scientific research, as long as the source is indicated and to the extent justified by the non-commercial purpose to be achieved;

(c) in the case of extraction and/or re-utilization for the purposes of public security or an administrative or judicial procedure.

¹⁸ BGH GRUR 2011, 724 – Zweite Zahnarztmeinung II.

Under the German Copyright Act the appropriate regulation can be found in Section 87c.¹⁹

It shall be noted that these exceptions have little significance in the field of electricity data. Extractions for private purposes are restricted to non-electronic databases. However, ENTSO-E and other transparency platforms publish electronic databases. Furthermore, the use for both, private purposes and scientific research, is restricted to “*substantial parts*” of the database and does not allow any reuse of complete databases. To maximize the accuracy of analysis, industry analysts and research will regularly make use of all data available. Hence it is plausible to assume that users of the Transparency Platform will often download an entire database.

3. Relationship between Transparency Obligations and Database Rights

Transparency obligations about electricity data are limited to the publication of the data. *Inter alia*, the goal of the transparency obligations is to allow new market participant access to market information which was prior unevenly distributed among market participants with large incumbent players having exclusive access to information in relation to their own assets.²⁰ However, Article 3 reads as follows:

“The central information transparency platform shall be available to the public free of charge through the internet and shall be available at least in English.

The data shall be up to date, easily accessible, downloadable and available for at least five years. Data updates shall be time-stamped, archived and made available to the public.”

¹⁹ See below III. 1. b).

²⁰ See recital 5 of the Regulation 543/2013

Any other reuse beyond accessing, reading and downloading the data is not mentioned in regulation 543/2013.

The question arises as to whether the regulation 543/2013 provides a limitation to the *sui generis* database right and how the relationship is formed among these statutory provisions.

Under traditional German doctrine in copyright law the limitations in Section 87c German Copyright Act contain a definitive list.²¹ Exceptions may be based on constitutional rights or the European fundamental rights and liberties. However, general law cannot limit the exclusive rights a right-holder of copyrights or neighboring rights might have.

As a result, Art. 3 of the Regulation 543/2013 and similar provisions have to be interpreted in a way that the data providers, e.g. ENTSO-E, have the obligation to license the *sui generis* database rights so as to allow the public to access and download the data on and from the website of the data provider. Insofar as the license conditions of a data provider do not comply with the requirements of the Regulation 543/2013 the reuse cannot be directly deducted from the Regulation but the data provider might be in breach of the regulation and legal recourse might be possible.

III. Reuse of Electricity Data – Use Cases

The maker of the database has the exclusive right to reproduce and distribute the database as a whole or a qualitatively or quantitatively substantial part of the database and to make this available to the public. Therefore and as a default, any such use is not permitted except a limitation on the *sui generis* database right applies or the maker of the *sui generis* database grants a license to the user. Accordingly, the use cases described above are examined in three steps:²²

²¹ Schricker/Loewenheim-Loewenheim, Urheberrecht, 5. Aufl. 2017, § 87c, para 1.

²² See list with use cases above in I.

- Is the respective act of reusing the data covered by the exclusive rights of the right-holder (or is the use outside the scope of the protection)?
- Are any exceptions to the *sui generis* right applicable (e.g. some kinds of private use, scientific research)?
- Is the respective act of reusing the data allowed under the license provided by the maker of the database?

The examination under the applicable licenses is made for the following data providers and makers of the database:

- ENTSO-E Transparency Platform (as of 1 May 2017)
- Eurostat
- List of power plants of Germany's Bundesnetzagentur (BNetzA)
- List of power plants Germany's Umweltbundesamt (UBA)

1. Downloading Data from a public accessible Data Platform

The uses cases described above do all require a download for later reuse. First of all, the question is whether the download is allowed or not and to what extent the intention for later reuse does affect the lawfulness of the download.

a) Necessary Rights for downloading Electricity Data

When downloading data from the website of a data provider the downloading person is creating a new copy of the data. This reproduction affects the rights of the owner of the *sui generis* right if the database is copied as a whole or a qualitatively or quantitatively substantial part of the database is copied. In cases in which only a few data of a database is needed the threshold of a "substantial part" may not be reached.

For the purpose of this legal opinion we assume that a substantial part of the database is downloaded, or the database as a whole and therefore the right in the database is affected.

b) Applicable Limitations on the *sui generis* right

§ 87c German Copyright Act regulates certain exceptions to the *sui generis* right depending from the intended use of the database. It reads as follows:

(1) The reproduction of a qualitatively or quantitatively substantial part of a database shall be permissible

1. for private use; this shall not apply to a database whose elements are accessible individually by electronic means,

2. for personal scientific use if and insofar as the reproduction is justified for that purpose and the scientific use does not serve commercial purposes,

3. for purpose of illustrative teaching insofar as this does not serve commercial purposes.

In the cases referred to in numbers 2 and 3 the source shall be clearly indicated.

(2) The reproduction, distribution and communication to the public of a qualitatively or quantitatively substantial part of a database shall be permissible for use in proceedings before a court, an arbitration tribunal or authority, as well as for the purposes of public safety.

On the one hand reproductions for the private and the scientific use of the database are allowed, on the other hand this use cases are restricted to “substantial parts” of the database and non-commercial usage. Hence, the repro-

duction of the complete database is not allowed without an appropriate license.²³ Furthermore, commercial reuse of the database is not allowed. Accordingly, substantial parts of a database cannot be reused within a new database under an Open Data license since Open Data licenses mostly do not restrict the usage to non-commercial purposes.

“*Substantial parts*” of the database are all limited versions of the database not containing the complete database. So far, no case law is known whether a court would accept the use of a “nearly complete database” (i.e. reproducing the complete database after having extracted one data or a few data sets) as a “substantial part” rather than considering it the use of a complete database. However, the reproduction of the database needs to be “justified” for scientific use. This criterion – another quite woolly formulation – means that the amount of reproductions shall be limited to the necessary extent.²⁴

It is difficult to assess which reuse serves “commercial purposes”. In any case the research of companies and contract research of universities do fall under the scope of “commercial purposes”.

c) License Grant for Reuse of Electricity Data

In most cases the statutory exceptions to the *sui generis* right will not suffice to be permitted to do the intended reuse. Therefore, this raises the issue of applicable license conditions of the data providers. In this context, “license” means the grant of a right to use the database with the scope of the right specified in the license. Under German law a license is considered a contract.

aa) ENTSO-E

The “General Terms and Conditions for the Use of the ENTSO-E Transparency Platform” is governing the use of data published at ENTSO-E’s website.²⁵ This

²³ Prevailing opinion, *Schricker/Loewenheim-Vogel*, Urheberrecht, 5. Aufl. 2017, § 87c, para 9.

²⁴ *Schricker/Loewenheim-Loewenheim*, Urheberrecht, 5. Aufl. 2017, § 87c, para 4.

²⁵ Terms of Use from June 2015, https://www.entsoe.eu/Documents/MC%20documents/Transparency%20Platform/150615_ENTSOE_Transparency_Terms_Conditions_Full.pdf

is not a classical license agreement but it stipulates which uses shall be allowed.

Sec. II.2. (5) provides as follows:

"5. Use of the Transparency Platform Data

In accordance with the applicable legislation, the Data User shall, when using of the Transparency Platform Data for any purpose whatsoever:

- use the Transparency Platform Data in good faith and always comply with good business practices regarding the re-use of publicly available data;*
- mention the ENTSO-E Transparency Platform as the source of publication of the data, in accordance with good industry practices and comply with all reasonable requests from ENTSO-E regarding the visibility of the ENTSO-E Transparency Platform origin of the re-used Transparency Platform Data;*
- be only allowed to make reference to the ENTSO-E Transparency Platform as the source of publication of the re-used data. It is therefore expressly prohibited to use the ENTSO-E Transparency Platform name or the ENTSO-E name in any manner that is likely to cause confusion regarding the possible existence of any kind of sponsorship or of endorsement of any use of the Transparency Platform Data by the Data User;*
- not cause prejudice to the copyright or related right on a Transparency Platform Data, which may be owned by the concerned Primary Owner of Data. In case of a risk to cause prejudice to said right, the Data User shall seek the prior agreement of the holder of the copyright or related right."*

There is no explicit clause for a grant of rights but the permission is somewhat assumed ("*when using of the Transparency Platform Data for any purpose whatsoever*"). Therefore, it remains unclear to which extent a re-use is permitted.

Moreover, ENTSO-E points out that the "Primary Owner of the Data (i.e. the entity which "*creates data and which has an obligation to submit this data to*

the Transparency Platform via a TSO or Data Provider, as stipulated in Regulation (EU) N°543/2013") may be the rightholder of the sui generis right. This raises additional questions. In particular, it is unclear whether such Primary Owner of the data has provided ENTSO-E with the necessary rights to allow the reuse of the data. Section II.1. of the Terms of Use contain rules for the "submission of data for publication on the transparency platform" but these rules do not contain a license grant.

Even more confusing is the fact that ENTSO-E's website disclaimer contains additional language about the use of content:²⁶

2. Ownership of Content

The Site and all of its contents including, but not limited to, all text, graphs and images ("Content") are owned and copyrighted by ENTSO-E or others with all rights reserved unless otherwise noted. Your use of any Content, except as provided in these Terms of Use, without the written permission of ENTSO-E is strictly prohibited.

3. Your Use of the Site

The ENTSO-E grants you permission to use the Site as follows:

- with the exception of images of people or places that are located outside of the "News" section of the Site, you may download Content, but only for non-commercial, personal use and provided that you also retain all copyright and other proprietary notices contained on the Content;*
- you may not use any images or graphs without ENTSO-E's written permission;*

²⁶ <https://www.entsoe.eu/disclaimer/Pages/default.aspx>

- *Content within the "News" section of the Site may be reproduced solely for editorial purposes in newspapers, news magazines, specialized publications and broadcast media;*
- *you may not distribute, modify, copy (except as set forth above), transmit, display, reuse, reproduce, publish, license, create derivative works from, transfer, sell or otherwise use Content without ENTSO-E's written permission;*
- ...

It seems that these conditions are meant to be applicable to the general content of the website but not to the data of the transparency platform although ENTSO-E itself refers to the terms and conditions of this disclaimer.

Both Terms of Use and the disclaimer are governed by the laws of Belgium. Therefore, we cannot provide a proper interpretation under German law. However, it is quite probable that the intention of the Terms of Use is to be in accordance with the Regulation (EU) N°543/2013.²⁷ Therefore, it can be argued that downloading the electricity data – i.e. complete data sets – for private and scientific use shall be allowed implicitly. But the exact scope of the license remains as unclear as the question whether Primary Owners of Data provide the necessary rights for such use.

bb) Eurostat

Eurostat licenses its material under the liberal *"Copyright notice and free re-use of data"* which allows a broad re-use of data:²⁸

"Eurostat has a policy of encouraging free re-use of its data, both for non-commercial and commercial purposes. All statistical data, metadata, content of web pages or other dissemination tools, official publications

²⁷ See the first sentence of the Terms of Use: „ In accordance with Article 3 of the Regulation (EU) N°543/2013 on submission and publication of data in electricity markets ("Regulation (EU) N°543/2013"), ENTSO-E has established and is operating an information transparency platform (the Transparency Platform)."

²⁸ <http://ec.europa.eu/eurostat/about/policies/copyright>

and other documents published on its website, with the exceptions listed below, can be reused without any payment or written licence provided that:

- *the source is indicated as Eurostat;*
- *when re-use involves modifications to the data or text, this must be stated clearly to the end user of the information."*

The license does not specify which usage rights are granted but refers to the "Legal notice" of the European Commission.²⁹ This reads as follows:

"Copyright notice

© European Union, 1995-2017

Reuse is authorised, provided the source is acknowledged. The Commission's reuse policy is implemented by the Decision of 12 December 2011 - reuse of Commission documents [PDF, 728 KB].

The general principle of reuse can be subject to conditions which may be specified in individual copyright notices. Therefore, users are advised to refer to the copyright notices on individual websites maintained under Europa and in individual documents. Reuse is not applicable to documents subject to intellectual property rights of third parties."

The "Commission decision of 12 December 2011 on the reuse of Commission documents" (2011/833/EU) defines in article 3 (2) the term "reuse":

" 'reuse' means the use of documents by persons or legal entities of documents, for commercial or non-commercial purposes other than the initial purpose for which the documents were produced. The exchange of documents between the Commission and other public sector bodies which use

²⁹ "The basis for the copyright and licence policy of Eurostat is the legal notice of the European Commission Europa website, which can be found here: https://ec.europa.eu/info/legal-notice_en"

these documents purely in the pursuit of their public tasks does not constitute reuse;"

This definition underlines the permission for commercial and non-commercial use but does not specify usage rights either. However, the commission decision explains which conditions are allowed to restrict the reuse of documents – including data³⁰ – of the Commission. According to Article 6 such restrictions may concern obligations for the reuser to acknowledge the source of the documents or not to distort the original meaning or message of the documents. Apparently, the Commission has no intention to restrict the grant of comprehensive rights in the documents, including the rights to reproduce, modify, distribute and make it publicly available. Therefore, we would like to interpret the Commission Decision and any licenses referring to this decision in a way that the aforementioned rights are granted to anyone as a non-exclusive license.³¹

Thus, Eurostat's "*Copyright notice and free re-use of data*" allows all kinds of reuse to the extent that no exception applies. In the context of electricity data the following exceptions may be relevant:

- The permission does not extend to any material whose copyright is identified as belonging to a third-party.
- When reuse involves modifications to the data, this must be stated clearly to the end user of the information. A disclaimer regarding the non-responsibility of Eurostat shall be included.
- No commercial reuse is allowed for Eurostat data identified as belonging to sources other than Eurostat (whereas all data published on Eurostat's website can be regarded as belonging to Eurostat for the purpose of their reuse, if not explicitly stated otherwise), or where the copyright belongs partly or wholly to other organisations,

³⁰ „The term „document“ is defined in the following way in Article 3 (1): “‘document’ means: (a) any content whatever its medium (written on paper or stored in electronic form or as a sound, visual or audio-visual recording); (b) any part of such content;”

³¹ During our research we have not found any interpretation of the Decision 2011/833/EU in German legal literature or case law.

for example concerning co-publications between Eurostat and other publishers.

- No commercial reuse is allowed for Eurostat data on countries other than Member States of the EU, and EFTA, and official EU acceding and candidate countries. In particular, this applies to data on the United States of America, Japan or China. There are specific provisions for trade data originating from Switzerland and Austria.

Accordingly, the download of electricity data from Eurostat's website is allowed.

cc) **Bundesnetzagentur (BNetzA)**

Germany's electricity network regulator, the "*Bundesnetzagentur für Elektrizität, Gas, Telekommunikation, Post und Eisenbahnen*" (Federal Network Agency for Electricity, Gas, Telecommunications, Post and Rail) provides a list of power plants. Bundesnetzagentur refers in its legal notice to the "*Data licence Germany - attribution- Version 2.0*".³²

"The Bundesnetzagentur owns the copyright and other proprietary rights on all material on this website, including the layout, source code, software and content. Copyright notices and trademarks may not be modified or removed. Unless otherwise indicated, the .xls and .csv files on the website are subject to the terms of the Data licence Germany - attribution- Version 2.0. Any other use requires the prior written permission of the Bundesnetzagentur."

The "List of Power Plants" is provided in the .xlsx and .csv formats and without any specific license information.³³

³² https://www.bundesnetzagentur.de/EN/Service/Imprint/imprint_node.html

³³ https://www.bundesnetzagentur.de/SharedDocs/Downloads/DE/Sachgebiete/Energie/Unternehmen_Institutionen/Versorgungssicherheit/Erzeugungskapazitaeten/Kraftwerksliste/Kraftwerksliste_CSV.csv?__blob=publicationFile&v=12

Hence, the *Data licence Germany - attribution- Version 2.0* (dl-de/by-2-0) applies.³⁴ The dl-de/by-2-0 allows the reproduction and the download of the list of power plants:

(1) Any use will be permitted provided it fulfils the requirements of this "Data licence Germany – attribution – Version 2.0".

The data and meta-data provided may, for commercial and non-commercial use, in particular

- 1. be copied, printed, presented, altered, processed and transmitted to third parties;*
- 2. be merged with own data and with the data of others and be combined to form new and independent datasets;*
- 3. be integrated in internal and external business processes, products and applications in public and non-public electronic networks.*

(2) The user must ensure that the source note contains the following information:

- 1. the name of the provider,*
- 2. the annotation "Data licence Germany – attribution – Version 2.0" or "dl-de/by-2-0" referring to the licence text available at www.govdata.de/dl-de/by-2-0, and*
- 3. a reference to the dataset (URI).*

This applies only if the entity keeping the data provides the pieces of information 1-3 for the source note.

(3) Changes, editing, new designs or other amendments must be marked as such in the source note.

dd) Umweltbundesamt (UBA)

The Umweltbundesamt (Federal Environmental Agency) publishes the database „Kraftwerke in Deutschland“ (power plants in Germany). The website contains the following license information:

³⁴ <https://www.govdata.de/dl-de/by-2-0>

“The Federal Environmental Agency points out that the database “power plants in Germany” is subject to copyright and may be used for non-commercial purposes only. Any other use, distribution or exploitation of the data is not permitted and needs specific written permission of the Federal Environmental Agency.”

Downloading as such has no commercial purpose and is allowed. Indeed, the license information does not specify what means “non-commercial purposes” but it would be an unreasonable interpretation to understand the license information in a way that the mere download shall be forbidden in the case that the downloading person is interested in later exploitation.

ee) Data Provider without using a License

If a data provider does not use any license for the published data reuse is not permitted except to the extent copyright exceptions apply.³⁵ Additionally, the fact that the data provider provides access to a database without technical or legal restrictions can be interpreted as an implicit consent to review the data and – if technically possible – to download the data.³⁶ However, any other kind of reuse is not permitted without explicit permission of the right holder.

2. Sending downloaded Data to a Colleague

Providing other people with downloaded electricity data can happen in many ways:

- Sending the data via email to a colleague of the same team

³⁵ See above III.1.b)

³⁶ This interpretation is based on German civil law and might be different if a foreign jurisdiction is applicable.

- Sending the data via email to another researcher of a different university
- Sending data via email to another researcher of a company

a) Necessary Rights for Forwarding Electricity Data

Sending electricity data via email to third parties results in creating a new copy of the data. This reproduction affects the rights of the owner of the *sui generis* right if the database is copied as a whole or a qualitatively or quantitatively substantial part of the database is copied. For the purpose of this legal opinion we assume that substantial part of the database or the database as a whole is sent to third parties and therefore the right in the database is affected.

b) Applicable Limitations on the *sui generis* right

§ 87c German Copyright Act allows the reproduction of substantial parts of a database for “*personal scientific use if and insofar as the reproduction is justified for that purpose and the scientific use does not serve commercial purposes*”. Therefore, sending electricity data to a researcher of another university or company would not be considered “*personal scientific use*”.

Most legal scholars interpret the requirement “*insofar the reproduction is justified*” in a way that no direct purchase is easily possible.³⁷ Consequently, electricity data from a publicly available source must not sent to colleagues of the same university but sending a link would be allowed. If the electricity data is not easily accessible (e.g. the website is shut down or the data modified) forwarding the electricity data to colleagues from the same university or scientific institution would be permitted but restricted to substantial parts of the database but not the complete database file. Thus, one would need to extract data before sending it to a colleague.

³⁷ Schricker/Loewenheim-Loewenheim, Urheberrecht, 5. Aufl. 2017, § 53, para 45.

c) License Grant for Reuse of Electricity Data

Above, we have described the applicable license conditions of certain data providers. Accordingly, the situation for the reproduction of a substantial part of the database when forwarding the data to another colleague is as follows:

aa) ENTSO-E

The Terms of Use are unclear and therefore no unambiguous assessment can be provided. Section 16 about "liability" is mentioning the transmission of data but it remains unclear if such transmission is considered as illegal by default or if ENTSO-E takes it for granted that such transmission and other reuse is allowed. Therefore, it is recommended to contact ENTSO-E directly to ask for permission of such kind of uses.

bb) Eurostat

The "Copyright notice and free re-use of data" allows the commercial and non-commercial use in a broad way. Forwarding the data to colleagues is permitted as well as to third parties including commercial companies. For certain restrictions (e.g. with regard to data originating from certain countries) see the remarks above.

cc) BNetzA

The "*Data licence Germany - attribution- Version 2.0*" is an Open Data license and provides a clear legal foundation for the reuse of data.³⁸ Therefore, forwarding the database with the List of Power Plants to any third party is allowed.

³⁸ See above.

dd) UBA

The license notice of the UBA is unclear of its scope. First of all, it is clearly stated that commercial use is not allowed and sending the database to a colleague of a company would be a reproduction which is not permitted. However, the license notice can be interpreted in a number of ways with regard to what means “*Any other use*” (is not allowed). This could mean that “any commercial use” is not permitted and all non-commercial use shall be allowed or that “*Any distribution or exploitation and any other commercial use*” is not permitted and the permission is restricted to the non-commercial internal use. The latter interpretation would exclude that the data is sent to third parties but not sending it to a colleague of the same university (since the university would be the licensee and not the researcher working for the university).

For avoidance of doubt, contract research (“*Auftragsforschung*”) is always considered as commercial.³⁹

3. Putting downloaded Data on an internal Network Drive

Putting downloaded data on an internal network drive allows other colleagues access to the data. The question is whether this kind of reuse is permitted.

a) Necessary Rights for putting downloaded Data on an internal Network Drive

Copying the data on an network drive requires the reproduction of the data. The situation in this regard is comparable to forwarding the data to a colleague of the same university or research institution. Additionally, the possibility to access the database might affect the right to make the database

³⁹ Schricker/Loewenheim-Loewenheim, Urheberrecht, 5. Aufl. 2017, § 87c, para 16.

available to the public according to § 87b (1) German Copyright Act. The question remains whether the colleagues of a university or a research institution are considered as the “public”. A definition of the term “public” can be found in § 15 (3) German Copyright Act:

“The communication of a work shall be deemed public if it is intended for a plurality of members of the public. Anyone who is not connected by a personal relationship with the person exploiting the work or with the other persons to whom the work is made perceivable or made available in non-material form shall be deemed to be a member of the public.”

Traditionally, the use within a university is considered public since the number of (potential) users is significant.⁴⁰

However, the European Court of Justice stated in the cases *SGAE./.Rafael* and *Svensson./.Retriever Sverige* “that the need for uniform application of Community law and the principle of equality require that where provisions of Community law make no express reference to the law of the Member States for the purpose of determining their meaning and scope, as is the case with Directive 2001/29/EC, they must normally be given an autonomous and uniform interpretation throughout the Community.”⁴¹ This also applies to the interpretation of the Directive 96/9/EC on the legal protection of databases. Therefore, the term “public” cannot be interpreted according to German law but needs to be interpreted as a European term.

The European Court of Justice emphasized in these two cases:

- ‘communication to the public’ must be interpreted broadly to establish a high level of protection
- the term ‘public’ refers to an indeterminate number of persons

⁴⁰ Schricker/Loewenheim-v. Ungern-Sternberg, Urheberrecht, 5. Aufl. 2017, § 15, para 392.

⁴¹ Case C-306/05, <http://curia.europa.eu/juris/celex.jsf?celex=62005CJ0306>

- a transmission is made to a public different from the public at which the original act of communication of the work is directed, that is, to a new public.
- it follows from Article 3(1) of Directive 2001/29 that, by the term ‘public’, that provision refers to an indeterminate number of potential recipients and implies, moreover, a fairly large number of persons.⁴²
- it is sufficient that the work is made available to the public in such a way that the persons forming that public may access it. Therefore, it is not decisive, that customers have not actually had access to the works.

The case law resulting from the jurisdiction of the European Court of Justice does not draw a clear line which number of persons is the minimum to be considered a “public”. This was denied for the patients of a dental practice (but with reference to the fact that they enjoyed the work without any active choice on their part),⁴³ but taken when hotel guests had access to television in their hotel rooms.⁴⁴

Thus, it has to carried out an overall view of the circumstances of the concrete situation. Providing access to a smaller group of researchers by putting downloaded data on an internal network drive might be outside the scope of the term “public” but providing (potential) access to a whole university might be considered as public.

For the purpose of this legal opinion we assume that the data is made publicly available.

⁴² Recital 21, <http://curia.europa.eu/juris/document/document.jsf?docid=147847>

⁴³ Case C-135/10, <http://curia.europa.eu/juris/document/document.jsf?docid=120443>

⁴⁴ Case C-306/05, <http://curia.europa.eu/juris/celex.jsf?celex=62005CJ0306>

b) Applicable Limitations on the *sui generis* right

§ 87c German Copyright Act allows the *reproduction* of substantial parts of a database under certain circumstances but not to make them publicly available. Hence, § 87c does not apply here.

The same is true for § 52a German Copyright Act which provides an exception for making works available to the public for instruction and research. But this limitation of copyright is restricted to copyrightable “works” but does not cover databases under the *sui generis* right for databases.

c) License grant for Reuse of Electricity Data

The applicable license conditions of the data providers contain permissions for reproducing (i.e. copying on the network drive) and making the data publicly available to the following extent:

aa) ENTSO-E

As mentioned before, the Terms of Use are unclear and therefore no unambiguous assessment can be provided. Therefore, it is recommended to contact ENTSO-E directly to ask for permission of such kind of uses.

bb) Eurostat

The “Copyright notice and free re-use of data” allows the commercial and non-commercial use in a broad way. Making the data available on a network to colleagues is permitted. For certain restrictions (e.g. with regard to data originating from certain countries) see the remarks above.

cc) BNetzA

The “Data licence Germany - attribution- Version 2.0” is an Open Data license and provides a clear legal foundation for the reuse of data. Therefore, making available the database with the List of Power Plants is allowed (be it within a university or to the general public).

dd) UBA

The license notice of the UBA is unclear of its scope, see above. We recommend to ask for an individual permission in the case of making available the data to the public.

4. Using Data as Input to a Computer Model and publishing the Model Results

a) Necessary Rights for using Data as input to a Computer Model and publishing the Model Results

As long as the model results do not contain a substantial part of the database the publication is allowed and independently from any rights in the database. The reason is that the publication of the results is not a publication of the database itself and therefore the activity does not affect the exclusive rights of the maker of the database.

However, using the data as input to a computer model will usually require the internal reproduction of the database or substantial part of it.

b) Applicable Limitations on the *sui generis* right

Section 87c (1) No. 2 German Copyright Act allows the reproduction of substantial parts of a database for personal scientific use if and insofar as the reproduction is justified for that purpose and the scientific use does not serve commercial purposes. This is usually the case if not the complete database is reproduced but a substantial part only. Nevertheless, the use when

performing contract research and the use of the database as a whole is not permitted under Section 87c (1) No. 2 German Copyright Act.

c) License grant for reuse of Electricity Data

The applicable license conditions of the data providers contain permissions for reproducing the database for input in a computer model in the following extent:

aa) ENTSO-E

With regard to our analysis above, it is quite probable that the intention of the Terms of Use is to be in accordance with the Regulation (EU) N°543/2013. Therefore, it can be argued that reproducing the electricity data – i.e. complete data sets – for scientific use in a computer model shall be allowed. But the exact scope of the license remains as unclear as the question whether Primary Owners of Data provide the necessary rights for such use.

bb) Eurostat

The “Copyright notice and free re-use of data” allows the commercial and non-commercial use in a broad way. Reproducing the data for input in a computer model is permitted. For certain restrictions (e.g. with regard to data originating from certain countries) see the remarks above.

cc) BNetzA

The “*Data licence Germany - attribution- Version 2.0*” is an Open Data license and provides a clear legal foundation for the reuse of data. Therefore, reproducing the database with the List of Power Plants for any purpose is allowed.

dd) UBA

The reproduction of the data for the use in a computer model is permitted if the model results are merely a scientific work and not made under a paid contract from third parties (i.e. others than the university, scientific institution). Otherwise an individual permission is needed.

5. Modifying Electricity Data

Modifying data is a usual activity when working with it. This includes acts as extracting data from a database, adding new attributes and combining data from different sources as well.

a) Necessary rights for modifying electricity data

§ 87b (1) German Copyright Act does not know an exclusive right of the maker of the database to modify the database (which is different to copyrightable works where the right to adaptations is part of the exclusive rights of the right owner).⁴⁵ However, most modifications need reproductions (e.g. the extraction of a substantial part of the database) and therefore a permission for copying is needed.

From the copyright perspective the more relevant activity is the publication and distribution of the database afterwards (see below 6.).

b) Applicable Limitations on the *sui generis* right

The reproductions to conduct the modification of the data is allowed under Section 87c (1) No. 2 German Copyright Act insofar as there is no commercial purpose and the reproduction is not covering the complete database.

⁴⁵ Schricker/Loewenheim-Loewenheim, Urheberrecht, 5. Aufl. 2017, § 87b, para 23

Sharing modified data with a colleague must be treated as sending the unmodified database to a colleague (see above 2.).

c) License grant for reuse of Electricity Data

Sharing modified data with a colleague must be treated as sending the unmodified database to a colleague (see above 2.).

6. Putting Electricity Data on a Website for Download

Publishing data on a website can occur in various constellations. As explained above the fact that the data has been modified is not the relevant point – modified and unmodified database can be treated in the same way if a substantial part of the database is published on the website.

The electricity data can be made available free of charge without specific license conditions for further reuse or under an Open Data license as the Creative Commons licenses.⁴⁶

a) Necessary rights for modifying Electricity Data

Putting data on a publicly accessible website needs a reproduction on a server and the right to make the database publicly available.

b) Applicable limitations on the *sui generis* right

§ 87c German Copyright Act allows the reproduction of substantial parts of a database under certain circumstances but not to make them publicly available. Hence, § 87c does not apply here.

⁴⁶ See an overview at <http://opendefinition.org/licenses/>

c) License grant for reuse of Electricity Data

The applicable license conditions of the data providers contain permissions for reproducing it on a server and making the data publicly available to the following extent:

aa) ENTSO-E

As mentioned before, the Terms of Use are unclear and therefore no unambiguous assessment can be provided. Therefore, it is recommended to contact ENTSO-E directly to ask for permission of such kind of uses.

bb) Eurostat

The "Copyright notice and free re-use of data" allows the commercial and non-commercial use in a broad way. Making the data publicly available for download is permitted if the source is indicated as Eurostat. When reuse involves modifications to the data, this must be stated clearly to the end user of the information. A disclaimer regarding the non-responsibility of Eurostat shall be included. For additional restrictions (e.g. with regard to data originating from certain countries) see the remarks above.

cc) BNetzA

The "Data licence Germany - attribution- Version 2.0" is an Open Data license and provides a clear legal foundation for the reuse of data. Therefore, making available the database with the List of Power Plants is allowed. Modifications must be marked as such in the notice for acknowledgment of source.

dd) UBA

The license notice of the UBA is unclear of its scope, see above. We recommend to ask for an individual permission in the case of making available the data to the public.

IV. De lege ferenda – Legislation to come to improve the Situation for the Reuse of Data

1. Amendments to the German Copyright Act

On June 30, 2017 the German Parliament (“Bundestag”) passed a bill for the adaptation of copyright law to the requirements of the information society.⁴⁷ The goal of this law is to improve the statutory limitations of copyright for the scientific use. This includes the use of databases protected under the *sui generis* database right. In the future, Section 87c (1) Nr.2 German Copyright Act reads as follows:

“(1) The reproduction of a qualitatively or quantitatively substantial part of a database shall be permissible

1. ...,

2. for the purpose of scientific research according to Sections 60c and 60d”

Section 60d German Copyright Act is a new exception for data and text mining whereas Section 60c (1) German Copyright Act is a specific exception for scientific non-commercial research allowing the reproduction, distribution and communication to the public of up to 15 % of a work for a restricted number of persons for the scientific research of these persons, and to single persons to examine the scientific quality of the scientific research. Furthermore, 75 % of a work are permitted to be reproduced for “personal research” (commercial and non-commercial) according to Section 60c (2) German Copyright Act.

⁴⁷ <http://dip21.bundestag.de/dip21/btd/18/130/1813014.pdf>

However, it remains somewhat unclear how the reference in Section 87c (1) No 2 German Copyright Act shall be understood. On the one hand Section 87c (1) No 2 German Copyright Act refers to *"The reproduction of a qualitatively or quantitatively substantial part of a database"*, on the other hand Section 60c German Copyright Act limits the use to 75 % and 15% *"of the work"* respectively. It remains unclear whether these percentages apply to databases as well and how to calculate it. Does it mean that 75 % and 15% of the complete database may be used or 75 % and 15% of a substantial part of the respective database? In any case the exception will not permit the use of a nearly complete database, i.e. more than 75 %, for personal research.

Differing from Section (7c (1) No 2 German Copyright Act Section 60c (2) German Copyright Act does not require that the reproduction is permitted only *"to the extent justified"*.

It seems that the new exception in Section 60c German Copyright Act will allow the passing on of smaller parts of a database (15 %) to other researchers or within a network of researchers for non-commercial research but sharing more than 15 % will be not permitted.

Section 60d German Copyright Act allows the reproduction of a database for the purpose of non-commercial data mining and it does allow communication of the database to the public for a restricted number of persons for joint scientific research of these persons, and to single persons to examine the scientific quality of the scientific research. *"Data mining"* is defined as *"automated analysis of a great number of works for scientific research"*.

According to the reasons chapter of the amendment bill the restrictions to non-commercial use are made with regard to the *aquis communautaire*, in particular Article 9 b Directive 96/9/EG (*"in the case of extraction for the purposes of illustration for teaching or scientific research, as long as the source is indicated and to the extent justified by the non-commercial purpose to be*

achieved”).⁴⁸ However, it is clarified that external funding of the research (“Drittmittelforschung”) is not considered “commercial”.

2. Proposal for a Directive on Copyright in the Digital Single Market

The *Digital Single Market Strategy* adopted in May 2015 identified the need “to reduce the differences between national copyright regimes and allow for wider online access to works by users across the EU”.⁴⁹ This Communication highlighted the importance to enhance cross-border access to copyright-protected content services, facilitate new uses in the fields of research and education, and clarify the role of online services in the distribution of works and other subject-matter.

In September 2016 the European Commission proposed a “Directive on copyright in the Digital Single Market”.⁵⁰ Article 3 of the proposed directive shall read as follows:

“Text and data mining

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

⁴⁸ See <http://dip21.bundestag.de/dip21/btd/18/123/1812329.pdf>, p. 39

⁴⁹ COM(2015) 192 final.

⁵⁰ COM(2016) 593 final.

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

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

This would allow member states to introduce a new exception to the *sui generis* database right to carry out data mining to which they have lawful access for the purposes of scientific research. There is no restriction to "substantial parts of the database" or "non-commercial purposes" required. Hence, the exception for text and data mining goes beyond the scope of the new exception under the German Copyright Act. According to Article 2 (2) "text and data mining" is defined as "any automated analytical technique aiming to analyse text and data in digital form in order to generate information such as patterns, trends and correlations"

The definition of "research institution" in Article 2 (1) clarifies that the organization has to be on a non-for-profit basis or recognized by a member state as "pursuant to a public interest mission":

"research organisation" means a university, a research institute or any other organisation the primary goal of which is to conduct scientific research or to conduct scientific research and provide educational services:

(a) on a non-for-profit basis or by reinvesting all the profits in its scientific research; or

(b) pursuant to a public interest mission recognised by a Member State;

in such a way that the access to the results generated by the scientific research cannot be enjoyed on a preferential basis by an

undertaking exercising a decisive influence upon such organisation;”

Additionally, the exception in Directive 06/9 /EC will be amended as follows according to Article 17:

(a) In Article 6(2), point (b) is replaced by the following:

“(b) where there is use for the sole purpose of illustration for teaching or scientific research, as long as the source is indicated and to the extent justified by the non-commercial purpose to be achieved, without prejudice to the exceptions and the limitation provided for in Directive [this Directive];”

(b) In Article 9, point (b) is replaced by the following:

“(b) in the case of extraction for the purposes of illustration for teaching or scientific research, as long as the source is indicated and to the extent justified by the non-commercial purpose to be achieved, without prejudice to the exceptions and the limitation provided for in Directive [this Directive];”

Therefore, the “old” exceptions remain more or less as stated in Article 9 of the Directive 96/9/EC with smaller modifications but the exception for data mining is added to those preexisting exceptions.

V. Appropriate Licensing for legally reliable Reuse of Electricity Data

Whereas the proposed directive on copyright in the Digital Single Market will improve the situation of researchers in the field of text and data mining, the existing statutory exceptions do not permit many uses cases which are necessary to conduct research in the field of electricity data. This affects uses as using data in software models, combining existing databases to new databases and sharing data from protected databases among researchers of different research organizations.

This is why an appropriate licensing of databases protected under *sui generis* database right is crucial to facilitate new uses in the fields of research. We have identified the following opportunities to achieve a clear and reliable licensing situation: using an appropriate Open Data license (1.), respecting reuse of data in consortium agreements for research projects (2.), requiring suitable licensing in funding decision of public authorities (3.).

1. Open Data Licensing

Open Data is the idea that data should be available to everyone to use and republish without restrictions of usage rights and license fees.⁵¹ The concept of Open Data is based on the philosophy of Free and Open Source Software which is very successful in the field of software development, including commercial use of the software.⁵² Whether or not a database can be considered as Open Data depends on the applicable license. Typical Open Data licenses are:

- Open Database License (ODC-ODbL) — Attribution/Share-Alike for data/databases⁵³
- Attribution License (ODC-By) — Attribution for data/databases⁵⁴
- Public Domain Dedication and License (PDDL) — Public Domain for data/databases⁵⁵
- Creative Commons Attribution Share-Alike 4.0 (CC-BY-SA-4.0) – Attribution/Share Alike for data/Databases⁵⁶
- Creative Commons Attribution 4.0 (CC-BY-4.0) – Attribution for data/databases⁵⁷
- Creative Commons CC0 (CC0) - Public Domain for data/databases⁵⁸

⁵¹ See Open Definition, <http://opendefinition.org/od/2.1/en/>

⁵² See <https://www.gnu.org/philosophy/selling.html>

⁵³ <https://opendatacommons.org/licenses/odbl/>

⁵⁴ <https://opendatacommons.org/licenses/by/>

⁵⁵ <https://opendatacommons.org/licenses/pddl/>

⁵⁶ <https://creativecommons.org/licenses/by-sa/4.0/>

⁵⁷ <https://creativecommons.org/licenses/by/4.0/>

⁵⁸ <https://creativecommons.org/publicdomain/zero/1.0/legalcode>

- Data licence Germany – attribution – version 2.0⁵⁹
- Data licence Germany – Zero – version 2.0⁶⁰

All these license provide the necessary grant of rights to reuse the licensed database and allow researches easily to share, modify, redistribute and publish the respective data. Whereas “Share-Alike” licenses require that modified database need to be licensed under the original Open Data license as well, the other Open Data licenses allow the use of modified data bases under differing license conditions if the attribution for the original rightholder is satisfied.

German authorities use Open Data licenses increasingly within the “GovData” initiative.⁶¹ GovData is a data platform to make data of German authorities publicly available. On European level the “European Union Open Data Portal” provides easy access to EU Data as a single point of access to a growing range of data produced by the institutions and other bodies of the European Union.⁶²

2. Provisions in Consortium Agreements

Research organizations conducting research collaboration usually use consortium agreements to govern the mutual rights and duties. Traditionally, such consortium agreements contain clauses about “Background IP” (i.e. intellectual property rights existing prior to the collaboration) and “Foreground IP” (i.e. intellectual property rights acquired during the collaboration).

After completion of a research projects it is often difficult to agree upon the licensing of the research results. As long as the rights in a database are split among several right holders it is required that all right holders agree upon

⁵⁹ <https://www.govdata.de/dl-de/by-2-0>

⁶⁰ <https://www.govdata.de/dl-de/zero-2-0>

⁶¹ <https://www.govdata.de/>

⁶² <https://data.europa.eu/euodp/en/data/>

further use of the database. Therefore, consortium agreements have high importance to set the necessary steps for a sustainable reuse of the database created during the cooperation. Providing Open Data licenses are one option to achieve this goal.

3. Requirements in Funding Decisions

Another way to ensure that a database is licensed under conditions allowing the reuse of data is the respective requirement in the funding decision of the funding entity. It is becoming increasingly common to require that publicly funded research results have to be licensed under an Open Data license or Open Source license respectively.

Using the aforementioned licensing option would significantly improve the situation for the reuse of data and avoid difficult negotiations with right holders and the clearing of rights.

Should you have any questions or need further explanations, please do not hesitate to contact us.

Best regards,



Dr. Till Jaeger
Attorney-at-law