Complaint about Radius' remote reading of electricity meters

Date: 10-02-2023

Decision

Private companies

No criticism

Complaint

Processed by the Data Council

Basic principles

Basis of treatment

Data protection through design and default settings

Based on a complaint about Radius' remote reading of electricity meters, the Danish Data Protection Authority has assessed that the processing of personal data has taken place within the framework of the data protection regulation and national special rules.

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Summary

The Danish Data Protection Authority has made a decision in a case where a number of citizens complained about Radius Elnet A/S' processing of personal data, as the company collects personal data about the complainants' electricity consumption in kWh on an hourly basis via remotely read electricity meters and then reports the information to Energinet.

Radius is an online company, i.e. a company that operates distribution networks for electricity in Denmark. In this connection, Radius collects consumption data from electricity customers, including complaints, via remotely read electricity meters.

In its decision, the Danish Data Protection Authority found that Radius' processing of the personal data had taken place within the framework of the data protection regulation and the national special rules that adapt the application of the regulation. The matter has been dealt with in the Data Council.

The Norwegian Data Protection Authority found overall:

that Radius' processing of personal data for the purpose of (i) billing and (ii) ensuring security of supply as well as sufficient quality and capacity in the electricity network is necessary to comply with a legal obligation, cf. the data protection regulation,

article 6, paragraph 1, letter c,

that the data protection regulation's article 25, par. 1, does not apply to the processing activity in question, as the activity was initiated before 25 May 2018, when the regulation applied, and

that there was no basis for establishing that the processing activities carried out by Radius on the basis of its legal obligation were in breach of the principle of proportionality in the data protection regulation, Article 5, subsection 1, letter c.

Ad 1)

The Danish Data Protection Authority emphasized that it is clear and precise from the legal basis to which Radius as a grid company is subject that Radius as a grid company must collect information on electricity consumption etc. on an hourly basis and report the information to Energinet, and that this must be done in a specified manner. Furthermore, the Danish Data Protection Authority emphasized that the collection of information on electricity consumption etc. with a view to ensuring security of supply as well as quality and capacity in the electricity grid is an integral part of the obligation to make the necessary transport capacity available and to provide access to the transport of electricity in the electricity supply grid, as well as to ensure the technical quality of the grid, which Radius is subject to as online business.

In this connection, the Danish Data Protection Authority noted that information on electricity consumption etc. basically do not in themselves constitute special categories of personal data covered by Article 9 of the Data Protection Regulation.

In selected cases and under certain circumstances, personal data may be considered sensitive personal data, although the information should not generally be considered sensitive. This applies, among other things, if the information via an intellectual reflection, e.g. deduction, can reveal sensitive information about a person. This may, for example, be the case where a person's name, which is not in itself sensitive personal data, appears in a list of patients admitted to an oncology department. However, in the opinion of the Danish Data Protection Authority, this is not the case if it requires the implementation of complex analyzes or the like. to derive sensitive personal data, e.g. information about religious beliefs from information about electricity consumption etc., if such analyzes etc. not actually carried out as part of the processing activity in question.

Ad 2)

With regard to the issue of data protection through design and through standard settings, the Danish Data Protection Authority assessed that the purposes and aids for the processing of personal data in question, i.e. collection of information on electricity consumption etc. on an hourly basis to be used for settlement and system operation purposes, had in any case been most

recently determined in December 2017, when the so-called flex settlement was put into operation by Energinet, after which the network companies, including Radius, have been obliged to collect and report the information on electricity consumption etc. to the data hub.

It was thus a processing activity that was initiated before 25 May 2018, which is why the data protection regulation's article 25, subsection 1, did not apply to the treatment activity. The fact that electricity meters have (continued) to be replaced by electricity customers in the period 25 May 2018 to 31 December 2020 could not, in the Data Protection Authority's view, lead to a different result.

Ad 3)

With regard to the question of proportionality, the Danish Data Protection Authority found, after an overall assessment, that there was no basis for determining that the processing activities carried out by Radius on the basis of the mentioned legal obligation under the Electricity Supply Act, etc., were in breach of the principle of proportionality in the article of the Data Protection Regulation 5 pieces. 1, letter c.

The Danish Data Protection Authority emphasized in particular that it is clear and specific from the legislation that the network companies, including Radius, are obliged to check the accuracy of the information that is reported to the data hub, and that this check requires access to the concrete measurement values that are collected on time basic.

Furthermore, the Danish Data Protection Authority found that there was no basis for overriding the assessment that it is necessary to check the individual measurement values, as provided for in the legislation, and that there was no basis for establishing that there were other, less intrusive ways of processing the information in question, given the objective pursued.

Finally, the Danish Data Protection Authority emphasized that the method proposed by the complainants – according to the complainants' own information – was not suitable for checking the individual measurement values, and that the method alone made it possible to check the correctness of aggregate measurement values on a monthly basis.

Decision

The Danish Data Protection Authority hereby returns to the case where [the complainants] complained on 26 August 2021 about Radius Elnet A/S' (hereinafter Radius) processing of personal data, as the company collects personal data about the complainants' electricity consumption in kWh on an hourly basis via remotely read electricity meters and reports the information to the so-called data hub.

The matter has been dealt with in the Data Council.

1. Decision

After a review of the case, the Danish Data Protection Authority finds that Radius' processing of personal data has taken place within the framework of the data protection regulation and the national special rules[1] that adapt the application of the data protection regulation.

Below follows a closer review of the case and a rationale for the Data Protection Authority's decision.

2. Case presentation

Radius is an online company, i.e. a company that operates distribution networks for electricity in Denmark. In this connection, Radius collects consumption data from electricity customers, including complaints, via remotely read electricity meters.

The information that Radius collects is electricity consumption on an hourly basis, measured in kWh, which is sent to the company every 6 hours. In addition, Radius collects information from the electricity meter of a more technical nature. In the case of:

whether there is a lack of voltage on the meter, i.e. that there is an interrupted connection in the power grid with the result that Radius cannot establish contact with the meter,

whether over/undervoltage or a 0 error has been registered on the meter, i.e. if the voltage quality is not as it should be,

any error messages on the meter.

This information is also collected every 6 hours.

In connection with error messages etc. can Radius draw a report from the meter with the technical values, the power load, registered disturbances, etc. to rectify any faults in the electricity supply.

2.1. Radius' remarks

Radius has generally stated that the company collects the complainants' personal data via remotely read electricity meters in order to comply with its obligations towards the energy market and to ensure the safe and efficient operation of the electricity network. Radius is obliged to collect information about electricity consumption and transfer this to the so-called data hub. The obligation follows from the Electricity Supply Act and Energinet's[2] market regulations, which are issued on the basis of the Electricity Supply Act. The information is used for settling consumption and balancing the electricity market.

In addition, Radius has stated that the company processes personal data related to technical matters in order to ensure proper

voltage quality, security of supply and sufficient capacity through planning, operation and maintenance of the distribution network in the area in which Radius has a license to operate network operations.

Radius has stated that the processing of the personal data thus takes place as a result of the legal obligations to which the company is subject under the Electricity Supply Act and regulations issued pursuant thereto, and thus takes place on the basis of Article 6, paragraph 1 of the Data Protection Regulation. 1, letter c.

With regard to the specific legal obligations to which Radius is subject, the company has referred to Section 22 of the Electricity Supply Act:

"§ 22. An online company must

maintain the technical quality of the network,

measure the electricity that is transported through the company's network and the electricity that is delivered to electricity customers or purchased from electricity producers within the network company's network area, [...]

PCS. 3. The network company reports information regarding the company's customer numbers to the data hub. The report must be made in accordance with regulations issued by Energinet on consumption of electricity, tariff information and other information of importance for the electricity trading companies' invoicing, cf. § 72 b, subsection 1. The network company notifies changes in prices and terms via the data hub. […]

PCS. 5. The Minister of Energy, Supply and Climate Change may lay down rules on the implementation of the provisions in subsection 1, nos. 1-6, and subsection 2 and 3, including on the measurement of electricity, on tasks and targets for the energy savings that the companies must collectively or individually ensure are achieved, on documentation, reporting and verification, on holding specified joint costs and on notification of changes in prices and terms via the data hub. The Minister for Energy, Supply and Climate Change can lay down rules that certain energy saving activities, cf. subsection 1, no. 5, must be done after a tender, and rules for holding the tender and for the companies' financing of the tendered tasks. […]"

The authorization in Section 22, subsection of the Electricity Supply Act. 5, has been used to determine executive order no. 75 of 25 January 2019 on remotely read electricity meters and the measurement of electricity in the final consumption. This includes, among other things, following:

"§ 2. The network companies must ensure that, before 31 December 2020, remotely read electricity meters are put into operation at all end users.

PCS. 2. Remotely read electricity meters must meet the requirements in §§ 4-7, cf. however § 11. […]

§ 4. A remotely read electricity meter must be able to

register the withdrawal and supply of electricity in the collective electricity supply network separately and with a registration every 15 minutes or at shorter intervals,

change settings for the registration frequency via a remote reading system, and

store measured data for use in consumption settlement.

PCS. 2. The meter system must be able to register supply interruptions at the consumer and, upon request from the grid company, transfer interruption data. […]

§ 5. A remotely read electricity meter must be able to pass on measured data about the withdrawal and supply of electricity for the individual time series to the grid company and an external entity. At a minimum, the remotely read electricity meter must be able to show accumulated values for the withdrawal and supply of electricity as well as the current electrical output.

§ 6. The interval for the transfer of measured data to the grid company must be adjustable and adapted to the companies' settlement and invoicing routines in accordance with regulations issued by Energinet.

PCS. 2. Measured data must be obtainable at any time from the remotely read electricity meter by the grid company."

The order also contains an obligation for the grid companies to submit the measured consumption data to the data hub:

"§ 8. The network companies submit hourly measured consumption data to the data hub from those of the network companies' end users where remotely read electricity meters have been put into operation, when regulations issued by Energinet have introduced a model for hourly billing of all end users."

Radius has also stated that since December 2017, Energinet has been ready to receive hourly measurements and settle based on this (so-called flex settlement). This has enabled a gradual phasing in for grid companies, and since 1 January 2021 it has been an obligation for grid companies that all end users are hourly metered and billed in the electricity market. It is therefore not in accordance with the legislation to measure consumption in other ways than hourly measurements. Both consumption and production, which are sent from or to the electricity grid from consumers and producers, are calculated hour by hour and settled hour by hour in the electricity market via the data hub. The entire electricity market is settled on an hourly basis, i.e. both the grid service, the electricity trading service, and Energinet's balancing of the market. The hourly data is therefore crucial for the structure, settlement and balancing of the entire electricity market.

Furthermore, Radius has referred to the fact that the company, according to Section 22, subsection of the Electricity Supply Act. 3, is obliged to report information on i.a. electricity consumption for the data hub according to regulations issued by Energinet.

Energinet sets the more detailed meter requirements that the grid companies must meet, including that the companies must validate the data obtained and when the information must be submitted to the data hub. This follows from § 8 of executive order no. 1067 of 28 May 2021 on system responsible business and use of the electricity transmission network, etc., which was issued pursuant to, among other things, Legislative Decree No. 1161 of 5 August 2022 on Energinet.

Energinet's meter requirements follow, among other things of Energinet's market regulations D.1. Of § 11, subsection 1, in the regulation, it follows that grid companies must deliver the meter values at measuring points no later than the 5th working day after the measured day:

"The network company must take home 15/60 values at all flex-settled measuring points in its own network area in the period from the 1st working day after the day of operation to the 5th working day at 21.00 after the day of operation."

Furthermore, the network companies have a duty to check the correctness of data, which follows from § 2 of the market regulation:

"§ 2. The network company is responsible for measuring all measurement points in its network area that are directly or indirectly included in the settlement with the electricity supplier, balance responsible, network company and/or Energinet. It is therefore the network company's duty to:

measurements are taken and taken home, alternatively estimated

check the correctness of the measurements

sending measurements per measurement point for DataHub

check the correctness of measurement data in DataHub

guarantee confidentiality and discretion regarding measurement data

PCS. 2. The grid company must check at least once a month whether the measurement data stored in the DataHub up to 3 years ago are identical to those stored in the grid company's own systems.

PCS. 3. Control of measurement data must be carried out as a minimum in the following way, cf. however section 30:

A random sample of monthly sums for 15/60 measurements for at least 400 measurement points up to 3 years back must be

taken monthly, regardless of the amount of data for the grid company in question.

If the entire sample is error-free, no further action is taken. If, on the other hand, there is the slightest inconsistency, monthly totals for all data in the two databases are checked 3 years back, as the network company resends all data that is not identical. PCS. 4. The grid company can alternatively skip the random check and in all cases check all data every month, cf. subsection 3, No. 2."

Radius has stated that the company, as a grid company, thus has a legal obligation to collect hourly measurements from electricity meters and submit these to the data hub.

The data and technical alarms that Radius collects are also necessary for the safe and future-proof operation of the electricity grid. Radius has a duty to ensure the technical quality of the electricity grid, cf. section 22, subsection of the Electricity Supply Act. 1, no. 1, and for this needs information on capacity, load, electricity quality and faults in the electricity network and the meter.

Finally, Radius has stated that the company cannot comply with its legal obligations in the Electricity Supply Act as well as notices and regulations issued pursuant thereto by collecting personal data about electricity consumption in other ways. As a grid company, Radius must collect and submit meter data to the data hub in accordance with regulations set by Energinet in order to maintain its license to operate grid business, and Radius cannot comply with these obligations without access to concrete measurements.

2.2. The complainants' comments

The complainants have generally stated that Radius' collection of information about electricity consumption etc. is disproportionate in that the company collects additional information than is necessary for the purpose. In addition, the processing activity does not adequately meet the requirements for data protection through design and through standard settings. According to the complainants, there is a more privacy-enhancing way to collect the necessary information. According to the complainants, the processing activity thus takes place in violation of Article 5, paragraph 1 of the Data Protection Regulation. 1, letter c, and Article 25, subsection 1.

The complainants have proposed an alternative way in which Radius can collect the necessary electricity consumption information in accordance with both the Electricity Supply Act etc. and the data protection regulations. It is the opinion of the complainants that the proposed approach – contrary to the current one – will be in accordance with the rules on proportionality

and data protection through design and default settings.

The procedure generally consists of the remotely read electricity meters having to send information about electricity consumption and electricity transport in kWh as well as kroner and eur to the data hub in such a way that the information can only be read by the electricity meter and the electricity customer. This must be done by encrypting the information in the electricity meter and sending it encrypted to the data hub. The electricity customer can access the information in the data hub via an encryption key, which, for example, appears physically on the electricity meter. In this way, the customer will continue to have access to his hourly consumption.

Price calculation must be done by sending all current prices from the electricity trading companies to the individual electricity meter one to four times an hour. This will enable the meter to calculate the total price of the electricity meter itself. With regard to the specific hourly price, which depends on the electricity customer's specific agreement with the electricity supplier, price calculation will take place by the meter determining via communication with the data hub which electricity trading company the electricity customer has an agreement with, and which of the current prices the meter must therefore use as a basis for the calculation.

The meter can then calculate and submit the following measurement points for the past month to the data hub:

the total electricity consumption (measured in kWh as well as in kroner and eur)

the total purchase price and selling price from the electricity supplier

the total purchase price and sales price from the network company

the total production and selling price for the producer (e.g. in the case of solar cells)

Contrary to the hourly-based consumption information, the network company and the electricity trading company will thus only have access to the monthly-based consumption information via the data hub. This information can be used for control and invoicing.

Finally, as part of this procedure, the grid company must set up electricity meters at street or entrance level. These meters will enable the company to collect information on electricity consumption on an aggregated level for several households, whereby it is not possible to isolate the electricity consumption for the individual household. This information can be used for balancing, capacity planning and control.

Collection of information of a more technical nature such as lack of voltage on the electricity meter, over/under voltage or a 0

error on the meter, as well as other error messages can be collected in the same way as it already happens today.

In the opinion of the complainants, Radius as a network company can, by this method, continue to collect meter information in accordance with the obligations arising from the Electricity Supply Act, the Metering Order, etc. However, it will be necessary to adapt individual provisions in Energinet's Market Regulation D.1, as the grid company will not be able to check the correctness of data on an hourly basis, but only on a monthly basis.

The complainants have also stated that information about electricity consumption etc. is information particularly worthy of protection and has indicated that it is possible to derive information about religion from electricity consumption on certain days, e.g. on Christmas Eve, during the Sabbath and during Ramadan. This is because the power consumption on such days will be recognizably different than on weekdays.[3]

Finally, the complainants have generally referred to the thesis "Legal framework for the use of remotely read electricity meters in light of the right to respect for privacy and protection of personal data" by Lisa Hjerrild at SDU, June 2021. The thesis deals with the issue which, in the complainants' view, is connected with the current procedure and refers, among other things to an opinion of the European Supervisory Authority (“EDPS”) from 2012[4]. The statement was issued in connection with a hearing by the EDPS in connection with the EU Commission's adoption of the Commission's recommendation of 9 March 2012 on the preparations for the introduction of intelligent metering systems (2012/148/EU) and mentions a number of privacy-promoting methods that should be considered with in order to ensure the principle of data minimisation.

3. Relevant legal regulations

3.1. The Electricity Supply Act and regulations issued pursuant thereto

3.1.1. The rollout of remotely read electricity meters

In 2013, the Minister of Energy, Supply and Climate Change was, by Act No. 642 of 12 June 2013, amending i.a. electricity supply act authorized to lay down rules on the replacement or upgrading of existing electricity meters to remotely read meters.

The authorization provision was worded as follows:

"§ 20 pcs. 2. The Minister of Energy, Supply and Climate Change may, after submission to a committee set up by the Folketing, lay down rules on the replacement or upgrading of existing electricity meters to remotely read meters."

The following appears from the special comments on the provision[5]:

"With the proposed new provision in subsection 2, the Minister for Climate, Energy and Buildings is given the opportunity to lay

down rules that ensure that remotely read electricity meters are rolled out throughout the country. The obligation will be imposed on the [network companies]. Hjemlen allows the minister to lay down rules on both the replacement and upgrading of existing meters. The minister will also be able to lay down provisions on the time horizon for the completion of the replacement or upgrade. According to the proposal, the rules must first be submitted to a committee set up by the Folketing for approval. No final decision has been made on a full or partial rollout of remotely read meters and, if so, within what time horizon. If such a decision is made, there will be a need for clear rules for the investment and the time horizon for its implementation. If a decision is made on the general roll-out of remotely read meters, it will be useful that the necessary basis for issuing an order to the grid companies can be established at short notice. This is ensured with the proposed provision."

On 3 December 2013, the Minister for Climate, Energy and Supply issued - after submission to the Climate, Energy and Supply Committee - executive order no. 1358 on remotely read electricity meters and the measurement of electricity in final consumption ("the meter executive order").

This appears from § 2, subsection 1, in the current executive order, that remotely read electricity meters must be commissioned by all end users before 31 December 2020. Of section 4, subsection 1, it appears that these meters must be able to register the withdrawal and supply of electricity in the collective electricity supply network separately and with a registration every 15 minutes or shorter intervals.

Of § 8, subsection 1, in the current executive order, it appears that the network companies submit hourly consumption data to the data hub from those of the network companies' end users where remotely read electricity meters have been put into operation, when regulations issued by Energinet have introduced a model for hourly billing of all end users.

The executive order has since been repealed upon the entry into force of executive order no. 75 of 25 January 2019 on remotely read electricity meters and the measurement of electricity in the final consumption.

3.1.2. Measurement of electricity etc.

Section 20, subsection of the Electricity Supply Act. 1, nos. 1-4, the following appears:

"Transmission and network companies must ensure a sufficient and efficient transport of electricity with associated services, including

maintain, remodel and expand the supply network in the supply area to the extent necessary,

connect suppliers and buyers of electricity to the collective electricity supply network,

make the necessary transport capacity available and provide access to the transport of electricity in the electricity supply network and

measure the supply and withdrawal of electricity in the network, cf. however section 22, subsection 1, No. 2."

Furthermore, it appears from the preparations for section 20, subsection 1, no. 4, in the Electricity Supply Act[6] the following:

"It appears from section 20, subsection 1, no. 4, in the Electricity Supply Act, that it is the responsibility of transmission and network companies to ensure a sufficient and efficient transport of electricity with associated services and including, among other things, measure the supply and withdrawal of electricity in the network. The provision applies to electricity at all voltage levels, cf. the special comments to section 20 of the proposal for an act on electricity supply, cf. Folketingstidende 1998-1999, appendix A page 5851."

Of the special remarks to § 20 in the proposal for an act on electricity supply, cf. Folketingstidende 1998-99, appendix A, p. 5899, the following also appears:

"License holders are obliged to ensure a sufficient and efficient transport of electricity through the network and to maintain sound and efficient operation through maintenance and expansion of the network infrastructure within the supply area, including connecting producers and consumers on the stipulated terms. Necessary reconstruction or new construction of the transmission network must be done in collaboration with the company responsible for the system and in accordance with the planning for the transmission network, cf. in this regard § 28, subsection 3, no. 7 and 8.

Licensees have a duty to measure the supply and withdrawal of electricity in the network at all voltage levels. The measurements must be able to meet the requirements that the company responsible for the system may have set according to the provision in section 28, subsection 3, no. 10, for measuring and collecting data."

It also follows from section 22, subsection of the Electricity Supply Act. 1, that a network company must maintain the technical quality of the network, cf. provision no. 1, as well as measure the electricity that is transported through the company's network and the electricity that is delivered to electricity customers or purchased from electricity producers within the network company's network area, cf. No. 2 of the provision.

Of the processors for § 22, subsection 1, no. 2, of the Electricity Supply Act[7] also states the following:

"Measuring electricity at an electricity consumer forms the basis for a correct settlement of the electricity consumer's consumption of electricity in question. Correct measurement and settlement of the consumed electricity are included as

integral parts of other activities such as e.g. establishment and completion of installations, installation of meters, including service of meters (replacement and control of them), reading of meters, reporting to the data hub of master data, measurement values and prices, collection of energy saving contributions, answering customer inquiries regarding technical questions and settlement of consumption vis-à-vis the electricity consumer's electricity trading business, including servicing of the electricity trading business by e.g. interruptions, reopening and complaints. Responsibility for taking care of all these activities lies with the company that has meter responsibility."

Furthermore, it follows from Section 22, subsection of the Electricity Supply Act. 3, that the network company reports information regarding the company's customer numbers to the data hub. The report must be made in accordance with regulations issued by Energinet on consumption of electricity, tariff information and other information of importance for the electricity trading companies' invoicing.

In addition, it appears from Section 22, subsection of the Electricity Supply Act. 5, that the Minister of Energy, Supply and Climate Change can lay down rules on the implementation of the provisions in subsection 1, nos. 1-6, and subsection 2 and 3, including on the measurement of electricity etc.

Section 28 of the Electricity Supply Act, subsection 1, contains Energinet's performance of tasks under the Electricity Supply Act. According to section 28, subsection 1, Energinet must i.a. draw up regulations for network companies' measurements, cf. section 28, subsection 1, no. 12, as well as draw up regulations that are necessary for the functioning of the electricity market, including regulations on the obligations and rights of the actors, cf. § 28, subsection 1, No. 13.

Finally, the Minister for Climate, Energy and Supply is authorized pursuant to Section 28, subsection of the Electricity Supply Act. 2, to lay down detailed rules on the content and performance of the tasks incumbent on Energinet pursuant to section 28, subsection of the Act. 1.

Pursuant to the Electricity Supply Act, the Minister for Climate, Energy and Supply has issued a number of orders.

Executive order no. 75 of 25 January 2019 on remotely read electricity meters and measurement of electricity in final consumption (the "meter order")[8] has been issued pursuant to, among other things, Section 22, subsection of the Electricity Supply Act. 5.

Section 8, subsection of the meter order. 1, it appears that the network companies submit hourly measured consumption data to the data hub from those of the network companies' end users where remotely read electricity meters have been put into

operation, when a model for hourly billing of all end users has been introduced in regulations issued by Energinet.

Executive order no. 1067 of 28 May 2021 on system responsible business and use of the electricity transmission network ("system responsibility executive order") has been issued pursuant to, among other things, section 28 of the Electricity Supply Act, subsection 2.

Section 8 of the executive order states the following:

"After discussion with grid, transmission and electricity trading companies, Energinet must draw up metering regulations for settlement and system operation purposes, which are necessary for the performance of Energinet's tasks. The metering regulations must contain requirements for grid and transmission companies' measurements of consumption, production and electricity exchange, including requirements for:

the extent of the measurements that the companies must carry out, including the extent to which electricity consumption must be measured,

the accuracy of the individual measurements, and

the dissemination of measurements to affected parties, including the deadlines within which the measurements must be forwarded"

Energinet has, in accordance with, among other things, § 8, subsection of the system responsibility executive order. 1, issued Market regulation D.1: Settlement measurement and settlement basis.

Section 11 of the regulation states, among other things, following:

"The network company must take home 15/60 values[9] at all flex-settled measuring points in its own network area in the period from the 1st working day after the day of operation to the 5th working day at 21.00 after the day of operation."

Furthermore, according to chapter 2 of the regulation, network companies have a duty to check the correctness of the information that the company reports to Energinet. The following appears from the chapter:

"Chapter 2 - General rules for measurement

§ 2. The network company is responsible for measuring all measurement points in its network area that are directly or indirectly included in the settlement with the electricity supplier, balance responsible, network company and/or Energinet. It is therefore the network company's duty to:

measurements are taken and taken home, alternatively estimated

check the correctness of the measurements

sending measurements per measurement point for DataHub

check the correctness of measurement data in DataHub

guarantee confidentiality and discretion regarding measurement data

PCS. 2. The grid company must check at least once a month whether the measurement data stored in the DataHub up to 3 years ago are identical to those stored in the grid company's own systems.

PCS. 3. Control of measurement data must be carried out as a minimum in the following way, cf. however section 30:

A random sample of monthly sums for 15/60 measurements for at least 400 measurement points up to 3 years back must be taken monthly, regardless of the amount of data for the grid company in question.

If the entire sample is error-free, no further action is taken. If, on the other hand, there is the slightest inconsistency, monthly totals for all data in the two databases are checked 3 years back, as the network company resends all data that is not identical.

PCS. 4. The network company can alternatively skip the random check and in all cases

check all data every month, cf. 3, No. 2.

§ 3. Measurement data per measurement point must always be positive, regardless of which type of measurement point measurement data is submitted on.

§ 4. The electricity supplier must contact the grid company or DataHub if the electricity supplier detects errors and/or values that deviate from what is expected in the measurement data per measurement point.

PCS. 2. In case of inconsistency between measurement data per measurement point and sum per electricity supplier cf. §§ 34, 35 and 37, the electricity supplier must contact Energinet or the grid company.

PCS. 3. The person in charge of the balance must contact Energinet if this detects inconsistencies between sums per [electricity supplier] and balance responsible cf. §§ 34, 35 and 37.

PCS. 4. The grid company must submit corrected data to DataHub if the grid company detects errors in the measurement data sent per measurement point. In case of inconsistency between measurement point per measurement point and sum per network area cf. §§ 34, 35 and 37, the network operator must contact Energinet.

PCS. 5. It is not permitted to send corrected time series together with uncorrected ones

time series. However, in the period from the 3rd working day after the day of operation at 10 a.m. to the 5th working day after

[business day] at 21.00 transmit all time series, if the first transmission has been incorrect.

General rules for 15/60 measurements

§ 5. When receiving 15/60 values, DataHub checks the received data.

PCS. 2. If Energinet detects errors and omissions during the inspection, cf. subsection 1, DataHub sends a negative receipt to the grid company stating the error.

PCS. 3. DataHub checks whether the received 15/60 values per measuring point is a correction of a previously received value. In that case, do the following:

The received 15/60 value is stored in the DataHub including the status code for whether it is a measured, estimated or missing 15/60 value. In addition, DataHub records whether it is a corrected 15/60 value.

The corrected 15/60 value per measuring point and calculated 15/60 values including the status code for corrected 15/60 value are forwarded to the electricity supplier within 1 hour. The network company's status code, on the other hand, is not sent.

§ 6. Settlement measurements must be true to time. The grid company may not compensate for previous measurement errors on later recorded 15/60 values.

PCS. 2. The network company must scale up or down the raw 15/60 values with a well-defined fixed proportional factor (which does not vary over time) on production plants with a meter conversion factor before the measurement values are redistributed to the DataHub for the purposes of recording production, cf. Energinet's regulation I. The same can occur on the consumption side by agreement between the customer and network company.

PCS. 3. 15/60 values are distributed as kWh with up to three decimal places.

§ 7. For virtual measuring points that are based on several physical meters, the grid company must create child measuring points and submit 15/60 values on all child measuring points to DataHub."

3.2. The Data Protection Regulation

3.1.1. Legal basis

According to Article 6 of the Data Protection Regulation, processing of personal data can include take place if the processing is necessary to comply with a legal obligation incumbent on the data controller.

From preamble consideration no. 41 to the data protection regulation, it appears in more detail about the requirements for the "legal obligation", which Article 6, paragraph 1, letter c, concerns. The following appears from this:

“When [the Data Protection Regulation] refers to a legal basis or a legislative measure, it does not necessarily require a law passed by a parliament, subject to requirements under the constitutional order of the Member State concerned. However, such a legal basis or legislative measure should be clear and precise, and its application should be predictable for persons covered by its scope, cf. the jurisprudence of the Court of Justice of the European Union ('the Court of Justice' «) and the European Court of Human Rights.”

The following also appears from preamble consideration no. 45 to the data protection regulation:

"If processing is carried out in accordance with a legal obligation incumbent on the data controller, or if processing is necessary to carry out a task in the public interest, or which is part of the exercise of public authority, the processing should have a legal basis in EU law or the national law of the Member States. This regulation does not imply that a specific law is required for each individual processing. It may be sufficient to have a law as a basis for several data processing activities which are based on a legal obligation incumbent on the data controller, or whose processing is necessary to carry out a task in the public interest, or which pertains to the exercise of public authority.”

From the Ministry of Justice's report no. 1565/2017 on the data protection regulation, p. 117, the following also appears about the previously applicable data protection directive's article 7, subsection 1, letter c, which was implemented by § 6, subsection of the Personal Data Act. 1, no. 3, and which according to the wording corresponds to the data protection regulation, article 6, subsection 1, letter c:

"The register committee has stated in report no. 1345 that the term legal obligation, according to a purely literal interpretation, covers any form of legal obligation. The committee further states that, regardless of this, it can hardly be assumed that the term must be understood as including all forms of legal obligations.

It follows from the comments to the Personal Data Act that the term legal obligation includes obligations that result from the legislation or from administrative regulations laid down pursuant thereto. The term also includes obligations arising from international rules, including EU legal rules. Just as obligations arising from a court decision or from a decision made by an administrative authority are also covered.”

It thus appears from the preamble considerations and report no. 1565/2017 that a legal obligation pursuant to the data protection regulation, article 6, subsection 1, letter c, does not necessarily have to be a law. It can also be legal obligations that appear from rules issued pursuant to law, e.g. executive orders and other administrative regulations, etc.

It also appears from the preamble considerations and report no. 1565/2017 that the legal obligation should be clear and precise, just as it should be predictable for persons covered by its scope of application.

3.1.2. Data protection by design and through default settings

Processing of personal data must – in addition to being based on a legal basis in Article 6 of the Data Protection Regulation – meet the other requirements of the Data Protection Regulation.

It includes i.a. the data protection regulation's article 25, which lays down the rules on data protection through design and through standard settings, and the regulation's article 5, which contains a number of general principles for the processing of personal data, including the principle of data minimization in article 5, paragraph 1, letter c.

It appears from Article 25 of the Data Protection Regulation that, both at the time of determining the means of processing and at the time of the processing itself, the data controller must implement appropriate technical and organizational measures, which are designed for the effective implementation of data protection principles, such as data minimization, and with a view to on the integration of the necessary guarantees in the processing to meet the requirements of this regulation and protect the rights of data subjects.

This must be done taking into account the current technical level, the implementation costs and the nature, scope, context and purpose of the processing in question, as well as the risks of varying probability and seriousness to the rights and freedoms of natural persons that the processing entails.

In other words, data protection through design and through default settings generally concerns how the data controller must arrange himself technically and organizationally in order to achieve effective implementation of data protection principles and integrate the necessary guarantees in the processing in order to meet the requirements of the data protection regulation and protect the rights of data subjects.

From the Ministry of Justice's report no. 1565/2017, p. 418, the following appears about the provision:

"Article 25, subsection 1, must be assumed to imply a duty for the data controller to include measures that concretely promote an effective implementation of the regulation's data protection principles in article 5 and its other rules.

Thus, the data controller must consider and handle how data protection in general, i.e. all the regulation's provisions can be complied with with concrete measures in the design of IT systems, such as their technical arrangement and user interface, as well as in the arrangement of the data controller's organization. […]

The regulation's article 25, subsection 1, in other words, does not entail a requirement that, for example, older systems must be redesigned if, for example, there are organizational security solutions that must be considered sufficient. This is because the regulation does not apply until 25 May 2018, and that Article 25, subsection 1, thus does not apply to already existing systems, cf. the wording in Article 25, subsection 2: "the time of determination" and "the time of the treatment itself". However, other provisions such as Article 32 on processing security may lead to demands for changes after 25 May 2018, if the existing system does not comply with the regulation."

Furthermore, the following appears from the report, p. 422:

"However, it is an innovation that data protection through design and through standard settings is mentioned as an explicit obligation for the data controller in the regulation.

It is also an innovation with Article 25, subsection 1, on data protection by design, that the actual time when the data controller must consider and deal with which measures can ensure compliance with all the data protection rules in the regulation when processing personal data is changed.

The innovation in Article 25, subsection 1, thus consists in the fact that the data controller is obliged to consider and deal with how, by means of technical and organizational measures, he can ensure data protection through design in order to thereby comply with the rules in the data protection regulation already at the time of determining the means for a given processing of personal data, i.e. that is, in the preparation phase, and at the time of the treatment itself, i.e. the first day of the actual processing of personal data in the IT system. […]

In conclusion, it must be emphasized that the data controller - regardless of the extent to which his processing of personal data is covered by Article 25, paragraph 1 and 2 – must in any case meet the other requirements of the data protection regulation, including article 5 and the regulation's provisions on the rights of data subjects and not least article 32 on processing security. […]"

3.1.3. The principle of proportionality

It follows from the data protection regulation's article 5, subsection 1, letter c, that personal data must be sufficient, relevant and limited to what is necessary in relation to the purposes for which they are processed.

The following also appears from preamble consideration no. 39:

"[…] Personal data should only be processed if the purpose of the processing cannot reasonably be fulfilled in another way.

[…]”

3.1.4. Article 6 of the Data Protection Regulation, subsection 2

According to the data protection regulation, article 6, subsection 2, Member States may maintain or introduce more specific provisions to adapt the application of the regulation's provisions on processing for the purpose of compliance with the regulation's article 6, paragraph 1, letters c and e, by setting more precisely specific requirements for processing and other measures to ensure legal and reasonable processing, including for other specific data processing situations.

Regarding (previously) applicable law according to the data protection directive, section 3.4.2[10] of the Ministry of Justice's report no. 1565/2017, i.a. following:

"It appears from Article 5 of the Data Protection Directive that, in accordance with the provisions in Chapter II, regarding general conditions for the lawful processing of personal data, the Member States specify the conditions under which the processing of personal data is lawful. […]

In case C-468/10, Asociación National de Establecimientos Finansieros de Crédito (ASNEF), judgment of 24 November 2011, the European Court of Justice was presented with a preliminary question by a Spanish court as to whether Article 7(f) of the Data Protection Directive should be interpreted as preventing a national legislation which, in the event that the data subject has not given his consent, and to enable the processing of the data subject's personal data, which is necessary for the data controller or the third parties, to to whom they are disclosed, can pursue a legitimate interest, in addition to ensuring that the data subject's fundamental rights and freedoms are not violated, requires that the information be listed in publicly available sources.

The Spanish law in question thus established an additional condition in Article 7(f) for valid processing. In addition to the requirement in the provision for the fulfillment of a legitimate interest, the Spanish law thus required that the information appeared in a publicly accessible register.

The European Court of Justice determined that it follows from the purpose of the data protection directive, which consists in ensuring a uniform level of protection in all Member States, that the directive's article 7 sets out an exhaustive and complete list of the cases in which the processing of personal data can be considered to be lawful. The Court then stated that Member States may therefore neither add new principles regarding the basis of data processing in Article 7 nor lay down additional requirements which change the scope of one of the six principles laid down in this Article.

Furthermore, it appears about the national discretion in the data protection regulation, article 6, subsection 2, of the report's section 3.4.3.1:

"It appears from the data protection regulation's article 6, subsection 2, that Member States may maintain or introduce more specific provisions to adapt the application of this Regulation's provisions on processing for the purposes of compliance with paragraph 1, letters c and e, by setting more precisely specific requirements for processing and other measures to ensure legal and fair processing, including for other specific data processing situations as referred to in Chapter IX (Articles 85-91).

[…]

The general purpose of the data protection regulation, the wording of the regulation's article 6, subsection 2, as well as preamble consideration no. 10 do not indicate that it was intended that the data protection regulation intended a different space - than according to the data protection directive - to set more specific national requirements for processing and other measures to ensure legal and reasonable processing with for the purposes of compliance with Article 6, subsection 1, letters c and e, why the national discretion in this area is in accordance with the data protection directive and a continuation of applicable law.

There is, however, the difference compared to current law, that it is explicit in the data protection regulation article 6, subsection 2, it is mentioned that the possibility that Member States can maintain or introduce more specific provisions is in order to comply with Article 6, paragraph 1, letters c and e.

There is thus based on the wording of Article 6, subsection 2, in principle, speak of a limitation in relation to applicable law, according to which the Member States were left with the possibility to specify the conditions for the processing of personal data in accordance with the provisions of Chapter II (that is, among other things, the Data Protection Directive Articles 6, 7 and 8 ), cf. Article 5 of the Data Protection Directive.

In relation to the treatment according to Article 6, subsection 1, letters a, b and d, this restriction in relation to the data protection directive - especially in light of the ASNEF judgment - will not have much practical significance. In relation to Article 6, subsection 1, letter a, the data protection regulation contains many clarifying rules on the nature of consent, see especially article 4, no. 11, and article 7, which is why it is not seen to be relevant in practice if Member States are left with an additional option to set more precisely specific requirements here. […]

It must then be concluded that since it is explicitly stated that Article 6, subsection 2, only relates to Article 6, subsection 1, letters c and e, and in conjunction with preamble recital no. 10, Member States will not be left with an opportunity to more

precisely determine specific requirements for processing and other measures as far as Article 6, paragraph 1 is concerned. 1, letters a, b, d and f. The same applies to the data protection regulation, article 6, subsection 3, which is mentioned immediately below."

4. Reason for the Data Protection Authority's decision

4.1. Basis of treatment

The Danish Data Protection Authority assumes that the information in question about electricity consumption etc., which Radius collects via remotely read electricity meters, is linked to the complainants as electricity customers and thus constitutes personal data about the complainants.

Furthermore, the Danish Data Protection Authority assumes that Energinet introduced a model for hourly billing and began receiving and billing on the basis of hourly measurements in December 2017.[11]

It is then the Danish Data Protection Authority's assessment that Radius' processing of personal data for the purpose of (i) settlement of consumption and (ii) ensuring security of supply as well as sufficient quality and capacity in the electricity grid is necessary to comply with a legal obligation, which appears in the Electricity Supply Act, the Metering Order and the system responsibility executive order, as well as regulations issued by Energinet pursuant to law.

The Danish Data Protection Authority has particularly emphasized that it is clear and precise from the legal basis to which Radius as a grid company is subject that Radius as a grid company must collect information on electricity consumption etc. on an hourly basis and report the information to Energinet, cf. in particular section 20, subsection of the Electricity Supply Act. 1, no. 4, and section 22, subsection 3, as well as section 8, subsection of the meter order. 1, and that it must be done in a specified manner, cf. section 8, subsection of the system responsibility executive order. 1, and Market Regulation D.1.

Furthermore, the Danish Data Protection Authority has emphasized that the collection of information on electricity consumption etc. with a view to ensuring security of supply as well as quality and capacity in the electricity grid is included as an integral part of the obligation to make the necessary transport capacity available and to provide access to the transport of electricity in the electricity supply grid, cf. section 20, subsection of the Electricity Supply Act. 1, no. 3, as well as to ensure the technical quality of the network, cf. Section 22, subsection of the Electricity Supply Act. 1, no. 1, to which Radius is subject as a network company.

It is also the opinion of the Danish Data Protection Authority that information on electricity consumption etc. basically do not in

themselves constitute special categories of personal data covered by Article 9 of the Data Protection Regulation.

In selected cases and under certain circumstances, personal data may be considered sensitive personal data, although the information should not generally be considered sensitive. This applies, among other things, if the information via an intellectual reflection, e.g. deduction, can reveal sensitive information about a person.[12] This may, for example, be the case where a person's name, which is not in itself sensitive personal data, appears in a list of patients admitted to an oncology department. However, in the opinion of the Danish Data Protection Authority, this is not the case if it requires the implementation of complex analyzes or the like. to derive sensitive personal data, e.g. information about religious beliefs from information about electricity consumption etc., if such analyzes etc. not actually carried out as part of the processing activity in question.

4.2. The design and layout of the treatment activity

4.2.1. The rollout of remotely read electricity meters

In the data protection regulation, article 25, subsection 1 (which is discussed above under section 3.1.2.), rules are laid down on data protection through design and through standard settings. The rule, which has been applicable since 25 May 2018, applies to processing activities initiated after this date and to significant changes to existing processing activities that occur after this date.

As stated above, the Danish Data Protection Authority assumes that Energinet introduced a model for hourly billing and began receiving and billing on the basis of hourly measurements in December 2017.[13]

In this connection, it is the Danish Data Protection Authority's assessment that the purposes and aids for the processing of personal data in question, i.e. collection of information on electricity consumption etc. on an hourly basis for use for settlement and system operation purposes, in any case, was most recently determined in December 2017, when the so-called flex settlement was put into operation by Energinet on the basis of the amendment to the Electricity Supply Act and the issuance of the meter order in 2013, and after which the grid companies, including Radius, have been obliged to collect and report the information on electricity consumption etc. to the data hub.

In the Data Protection Authority's view, this is therefore a processing activity that was initiated before 25 May 2018, which is why Article 25, paragraph 2 of the Data Protection Regulation. 1, does not apply to the processing activity. The fact that electricity meters have (continued) to be replaced by electricity customers in the period 25 May 2018 to 31 December 2020 cannot, in the Data Protection Authority's view, lead to a different result.

With regard to issues of proportionality, the Danish Data Protection Authority notes the following:

As stated above in section 4.1, it is the Danish Data Protection Authority's assessment that Radius is subject to a legal obligation to measure the supply and withdrawal of electricity in the network, cf. Section 20, subsection of the Electricity Supply Act. 1, no. 4, and section 22, subsection 1, no. 2, as well as to report information about the company's customer numbers to the data hub, cf. § 22, subsection 3, which must be done in accordance with regulations issued by Energinet on consumption of electricity etc.

Of § 8, subsection 1, in the meter order issued pursuant to Section 22, subsection of the Electricity Supply Act. 5, detailed rules on the manner in which Radius must measure and report information on electricity consumption etc.

Thus, i.a. a legal obligation to collect information on electricity consumption etc. on an hourly basis and report the information to the data hub. Furthermore, there is a legal obligation to ensure the correctness of the information in a specified manner. This obligation follows from Market Regulation D.1, which has been laid down pursuant to, among other things, section 28 of the Electricity Supply Act, subsection 2, and in the opinion of the Danish Data Protection Authority requires access to the individual hourly measurements.

The Danish Data Protection Authority notes that the data protection regulation only contains a national discretion to set more specific national requirements for processing and other measures to ensure legal and fair processing with a view to complying with Article 6, subsection 1, letters c and e.

It is not possible to introduce national legislation that deviates from the basic principles in Article 5 of the Data Protection Regulation, including the principle of proportionality in Article 5, subsection 1, letter c.

After an overall assessment, the Norwegian Data Protection Authority finds that there is no basis for determining that the processing activities carried out by Radius on the basis of the mentioned legal obligation under the Electricity Supply Act etc., are in breach of the principle of proportionality in Article 5, paragraph 1 of the Data Protection Regulation. 1, letter c.

The Danish Data Protection Authority has particularly emphasized that it is clear and specific from chapter 2 of the Market Regulation D.1, which is laid down pursuant to the Electricity Supply Act and regulations issued pursuant thereto, that the network companies, including Radius, are obliged to check the correctness of the information that is reported to the data hub, and that this check requires access to the concrete measurement values that are collected on an hourly basis. It thus appears clearly and specifically from Market Regulation D.1 which information Radius, as a network company, is obliged to process and

how.

Furthermore, the Danish Data Protection Authority finds that there is no basis for overriding the assessment that it is necessary to check the individual measurement values, as required in Market Regulation D.1, and that there is no basis for establishing that there are other, less invasive ways of processing the information in question, having regard to the objective pursued.

The Danish Data Protection Authority has finally emphasized that the method proposed by the complainants – according to the complainants' own information – is not suitable for checking the individual measured values, and that the method alone makes it possible to check the correctness of aggregated measured values on a monthly basis.

[1] Legislative Decree No. 984 of 12 May 2021 on electricity supply and decrees and regulations issued pursuant thereto.

[2] Energinet is an independent public company under the Ministry of Climate, Energy and Supply. The company owns and develops electricity and gas grids in Denmark in order to incorporate more renewable energy, maintain security of supply and ensure equal market access to the grids.

[3] In this connection, the complainants refer to the thesis "Legal framework for the use of remotely read electricity meters in light of the right to respect for privacy and protection of personal data", Lisa Hjerrild, June 2021, SDU, pp. 107f.

[4] Opinion of the European Data Protection Supervisor on the Commission Recommendation on preparations for the roll-out of smart metering systems, 8 June 2012.

[5] L 180, FT 2012-13, the special comments to § 1, no. 1.

[6] L 165, FT 2017-18, the special comments to § 1, no. 5.

[7] L 165, FT 2017-18, the special comments to § 1, no. 6.

[8] Executive order no. 75 of 25 January 2019 amended and replaced executive order no. 1358 of 3 December 2013, which was the original order that laid down rules for the rollout of remotely read electricity meters.

[9] A "15/60 value" is defined in the regulation as a measurement value that has emerged from a 15/60 measurement. "15/60 measurement" means a remotely read measurement on a quarterly or hourly basis that is included in the balance settlement. In Western Denmark, production/exchange is indicated on a neighborhood basis and consumption on an hourly basis. In Eastern Denmark, only an hourly basis is used, with the exception of production on newer offshore wind farms starting with Rødsand 2.

[10] Report no. 1565 - The Data Protection Regulation (2016/679) - and the legal framework for Danish legislation, pp.

142-147.

[11] In its letter of 30 November 2021, Radius has stated that Energinet has been ready to accept and settle hourly on the basis of hourly measurements from and including December 2017. Similarly, it appears from Energinet's annual report 2017 that "in the area of electricity, the successful start-up of flex billing in December as well as the first year's full operation of the wholesale model […] correspondingly significant results in the past year."

[12] See also the judgment of the European Court of Justice of 1 August 2022 in case C-184/20, Vyriausioji tarnybinės etikos komisiya, paragraphs 118-128.

[13] In its letter of 30 November 2021, Radius has stated that Energinet has been ready to accept and settle hourly on the basis of hourly measurements from and including December 2017. Similarly, it appears from Energinet's annual report 2017 that "in the area of electricity, the successful start-up of flex settlement in December as well as the first year's full operation of the wholesale model […] correspondingly significant results in the past year."