Smart Energy Systems & the EU data protection regulation

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Why interesting?
Energy data vs. personal information

Current regulation?
Data protection directive 1995/46/EC
Electricity directive 2009/72/EC

The future regulation?
General Data Protection Regulation from May 2018 (2016/679/EC)
Proposal for revised electricity directive
The future: Digital single market
Contradicting rights

Challenges
- Privacy
- Concent
- Legal basis
- Processing / transfering
- Dataminimizing
- Good practice
- Internal market
- Security (hacking)
The challenge in smart energy systems

Access to data

Who can use what data and the big question is the growth of de-central devices behind the meter.

The political attention needs to focus on this question to raise society awareness and to call upon the market participants to find solutions.
Which types of energy data?

- **Consumer data** (name, address, identification number, phone, family status, economic situation, vulnerability etc.)

- **Consumption data**
  - Primary Purpose: Billing and, if applicable, dimensionalizing and balancing
  - Other purposes: Internal use, statistics, profiling, energy efficiency

- **Personal data**
When does the GDPR apply?

GDPR article 2, point 1:

“This Regulation applies to the processing of personal data wholly or partly by automated means and to the processing other than by automated means of personal data which form part of a filing system or are intended to form part of a filing system.”
Definitions

Personal data – GDPR article 4 (1):

• any information relating to an identified or identifiable natural person (‘data subject’);
  • an identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person;

Processing – GDPR article 4 (2):

• any operation or set of operations which is performed on personal data or on sets of personal data, whether or not by automated means, such as collection, recording, organisation, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction;
Lawfulness of processing - article 6: Ordinary data

1. Processing shall be lawful only if and to the extent that at least one of the following applies:
   (a) the data subject has given consent to the processing of his or her personal data for one or more specific purposes;
   ...
   (c) processing is necessary for compliance with a legal obligation to which the controller is subject;
   ...
   (e) processing is necessary for the performance of a task carried out in the public interest or in the exercise of official authority vested in the controller;
   ....

3. The basis for the processing referred to in point (c) and (e) of paragraph 1 shall be laid down by:
   (a) Union law; or
   (b) Member State law to which the controller is subject.
Data protection principles – article 5

Personal data shall be:

- Processed fairly and lawfully and in a transparent manner
- Obtained only for one or more specified, explicit and legitimate purposes, and shall not be further processed in any manner incompatible with that purpose or those purposes
- Adequate, relevant and limited to what is necessary in relation to the purposes for which they are processed (‘data minimisation’);
- Accurate and, where necessary, kept up to date
- Shall not be kept for longer than is necessary for that purpose or those purposes
- Shall be processed in accordance with the rights of data subjects under this Act
- Appropriate technical and organisational measures shall be taken
Data protection Impact assessment!

Article 35: A data protection impact assessment shall in particular be required in the case of:

(a) a systematic and extensive evaluation of personal aspects relating to natural persons which is based on automated processing, including profiling, and on which decisions are based that produce legal effects concerning the natural person or similarly significantly affect the natural person;

(b) processing on a large scale of special categories of data referred to in Article 9(1), or of personal data relating to criminal convictions and offences referred to in Article 10; or

(c) a systematic monitoring of a publicly accessible area on a large scale.
Consumption data = Personal data ???

Personal data: understood broadly - Many types of data and data that can be identified by Big Data and the ability to compare with other data!

Is it sensitive information (art. 9)? It may be! Decisive for what category of information is the knowledge that is conveyed through the processing context of the information.

A name is an ordinary personal information, but changes character if the name occurs in a context where sensitive information is revealed - for example, a list of social cases.
Concluding remarks

Awareness of the GDPR – may 2018

Energy data can (easily) become personal data – and sensitive data

The legal basis must be taken in to account when developing smart energy systems => Consent or legal obligation
Thank you for your attention