

IOTWeek

Dublin — June 20-23, 2022

DATA SPACES FOR ENERGY, HOME AND MOBILITY

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GLOBAL VISION:

IoT TODAY AND BEYOND

IoTForum

EC workshop “Best Practices for Energy Data Sharing”

Four Challenges:

1. Interoperable building blocks for open, scalable data space

2. An Economic and Legal Framework across different policy streams

3. Establish a Governance System for the Energy Data Space

4. A Forum for Open Standards, Open data models, open source

OPEN DEI Position Paper - Motivation

Massive Decentralization and Digitalization of Energy System



Interconnection of:

ENERGY
Electricity
Production,
Transmission,
Distribution



HOME
Flexible Building
Asset(Heat
Pumps, Storage)



E-MOBILITY
Electric-Vehicles
Charging and Use

OPEN DEI
ENERGY DOMAIN
WORKING GROUP 2: DATA & SHARED INFRASTRUCTURES

DATA SPACES FOR ENERGY, HOME AND MOBILITY
V1.1
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Abstract
The European Commission is preparing an Action Plan on the Digitalisation of Energy (DoEAP), in order to develop an efficient, competitive market for a digital energy infrastructure and digital energy services that are both cyber-secure and sustainable. The data includes metering data, data from consumers such as home appliances, building automation, EV charging stations, or prosumers PV panel & inverters. Its availability and timely sharing and use among the relevant players is key for the energy transition. Data exchange is crucial for emerging energy data services in a digital energy market and will help suppliers and energy service providers to innovate and cope with an increasing share of renewables in a more decentralised energy system. The concept of Energy Data Spaces will be tackled as a pillar of the DoEAP. These concepts allow orchestration of data access across different market actors like TSOs, DSOs, aggregators and other energy service providers. As a baseline for a data space, the data and technology components must be built on formal or pre-normative standards, stakeholder driven, interoperable and open.

Prepared for:
European Parliament
Directorate-General Internal Policies
Directorate G - Impact Assessment and European Added Value

1. Data Exchange approaches at domain level:

ENERGY

- PLATOON project approach
- CIM Market
- SmartDataModels

INTEROPERABILITY OF GRIDS AND BUILDINGS

- Trialog use cases
- EEBUS & OpenADR
- SAREF & InterConnect project

E-MOBILITY

- EC perspective
- EEBUS approach

2. Cross-domain approaches:

- i4Trust building blocks for Data Sharing
- Smart Energy Operating System
- Standardization: IoT and Digital Twin

Under construction: more content to be added...



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Thank you!

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