Data management & governance

View on data sharing and data-driven services from within the Dutch energy sector
Topics for today

1. Context & ambition
2. Scope & concept
3. Process & status
Initial drivers for the Dutch data governance programme

- **EU CEP: wider exchange of energy data**
  - CEP (incl. art. 23 & 24, data mgt) to be implemented by end 2020

- **EZK: new Energy Bill development**
  - Energy Bill addressing CEP implementation (incl. data mgt)
  - Ambition: building a digital economy through data sharing coalitions (also cross-sectoral)

- **ACM: vision on data governance**
  - Regulator (ACM) identifies shortcomings in existing model and shares vision on data governance
### Ambition: improve governance, rules & systems for data exchange & market facilitation

<table>
<thead>
<tr>
<th>Customer centric</th>
<th>Wide acceptance</th>
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<tbody>
<tr>
<td>The customer gives individual consent to all ‘qualifying parties’ (without a legal task) that want to use his data</td>
<td>Decisions require a sufficient basis of acceptance by all relevant market parties, taking into account their tasks, roles and responsibilities</td>
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<thead>
<tr>
<th>Collectively</th>
<th>Accessibility</th>
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<tbody>
<tr>
<td>Grid operators are collectively responsible for optimal and independent market facilitation (policy making and execution)</td>
<td>Parties get access to data under equal conditions, based on customer consent, a legal tasks, or another valid basis for the processing of personal data</td>
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<thead>
<tr>
<th>Current roles and responsibilities</th>
<th>Cost effective and efficient</th>
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<tbody>
<tr>
<td>Legal responsibilities of grid operators and roles of the various market parties are respected. Codes and sector agreements are complied with</td>
<td>The cost efficient system builds on existing elements, and ensures optimal coupling of files to ensure that data is stored only once (at the data source) and is accessible 24x7</td>
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<th>Effective</th>
<th>Future proof</th>
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<tbody>
<tr>
<td>The sector governance provides fast and effective decision-making for both rules and regulation, and for process and IT modifications</td>
<td>In the future, the market should be facilitated in an optimal way, both physical as well as digital</td>
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<th>Independent</th>
<th>Quality and service standards</th>
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<tbody>
<tr>
<td>The market facilitation system operates objectively, transparent, and facilitates the market in terms of societal interests</td>
<td>Sufficient guarantees for quality of data and processes; requests from market parties should be threateded adequately and at a societal justified cost level</td>
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Identifying the data sharing stakeholders in the digital ecosystem of DSOs & TSOs

- Customers
- Existing market parties
  - Suppliers, Generators
  - Metering companies
  - BRPs
- New market parties
- Government, municipalities
- Other sector market parties:
  - Finance
  - Transport
- Municipalities
- Regulators
- Policy Makers
- Market Parties
- Other grid companies
- Other sectors:
  - Transport
  - Building
- Customers
- Contractors
- Installation companies
- Other Infrastructure providers
- Asset vendors
- Cross sectoral (energy & X sector)
- TSO & DSO system operations
- Flexibility Service Providers
- BRPs, CSPs & BSPs
- DA & ID market operators

Customer & Markets data management

Infrastructure Operations

Grid analysis & Planning

System Operations

- Shareholders
- Policymakers
- Investors
- Media
... and their specific use cases regarding exchange of energy data

**Market Facilitation:**
- Traditional market facilitation processes (switching, metering, A&R)
- New services (price comparison, tailor-made offerings, ESCO services, ...)
- Research and statistics (national energy balances, domestic consumption, ...)
- Open data

**Planning Alignment:**
- City & RES planning data from municipalities
- Roll out planning EV CSPs
- EV planning in public transport
- Energy efficiency plans from building corporations
- Network development planning grid operators

**Key enablers:**
- Identification, authentication and authorization (consent mgt.)
- Transparency (towards customer): data access rights, data usage, ...
- Operational requirements: data findability, standardization, interoperability, SLAs, ...

**Infrastructure Operations:**
- Ordering and track & trace
- Operational planning with customers, outsourcers and other infrastructure providers

**Corporate:**
- Corporate performance
- Media communications

**System Operations:**
- Customer outage management
- DA & ID grid capacity forecasting
- Market interaction on congestion & balancing
- Flexibility procurement
First scope: data for market facilitation processes, driven by stakeholder use cases

- Tailored energy contract offering
- Access to log of consent usage
- Automated EAN code access
- Energy efficiency services
- Price comparison
- Tailored offering by infrastructure companies
- Benchmarking of energy consumption

**Current market facilitation processes**
- Master data distribution
- Switching, relocation and end of supply
- Consumption data distribution
- Security of supply
- Supplier-centric model

**Initial scope**
- Underlying data categories
  - Point of supply characteristics
  - Contractor attributes
  - Contract information
  - Location data
  - Market parties
  - Meter reading
  - Technical characteristics
  - Metering point read-out attributes
  - Consumption data
  - Time & date entries
Governance structure allows to set & maintain the rules based on input from market parties.
Overview of joint concept: exchange of decentral data based on central framework

Decentralized portals / applications can be freely implemented by stakeholders as long as they comply with the framework.

Services offered by third parties for identification and authentication of clients / end customers (e.g. IDIN, DigiD, etc.)

Access via individual gateways that comply with the appointment system.

Registration and checking of consent at the data source.

Current decentralized databases (e.g. EDSN, land register, etc.) are preserved.

Registration of requested data.
Energy Data Exchange Framework components

- **Standards for static data**: data structure, semantics, etc.
- **Standards for data in transit**: message formats, API specs, etc.
- **Common practices and tools**: for identification and authentication of entities involved in initiative.
- **Common agreements on all relevant legal matters**: such as liability, penalties, contracts, etc.
- **Common governance structure**: that oversees operations, change management, disputes, etc.
- **Specification of the business model**: for both the initiative itself and participants/users of initiative.
- **Common agreements on relevant operational procedures**: such as SLAs, change processes, etc.
- **Metadata**: standards for the structure and semantics of metadata of data that is being shared through initiative.
Clear governance and roles of the energy data exchange framework

**Market Facilitation Forum (MFF)**
- Formulates a decision w.r.t. adaptations to the rules regarding:
  - **what** data is exchanged (Information Code)
  - **how** data is exchanged (DEF)
- An open (discussion) forum with membership thresholds as low as possible
- All relevant stakeholders can participate, albeit through representation

**Framework Administrator**
- Executes decisions
- Facilitates and supports the MFF
- Administers framework w.r.t. process & content
- Coordinates implementation of sector releases
- Legal entity, with a management, topic managers and supporting office
- Execution by the grid operators
- Neutrality secured through supervisory board
Process & status (October 2020)

• 2018: discussions between TSO & DSO on data mgt resulting in an agreement on high level concept outline & principles

• 2019:
  ▪ Feb-May: discussion with ministry (EZK) & regulator (ACM), preparing market dialogue
  ▪ June: start of open market dialogue sessions with all stakeholders (existing and new roles)
  ▪ Dec: agreement reached with all stakeholders, positive appreciation of ministry (EZK)

• 2020:
  ▪ Jan-March: preparation of implementation (‘20-’21)
  ▪ March-Today:
    ▪ Collaborative working sessions on governance structure and legal design (to be finalized by end ‘20)
    ▪ Analysis of legal barriers

• 2021:
  ▪ Governance transition
  ▪ Start of technical workstream

Successful data sharing requires cooperation and commitment of all parties from the start
Thank you

Questions?

Recommended reading