Estonian experience in energy domain

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Components Needed

Laws, regulations
ID-Card, mobile ID
PKI Services
Digital Signature System
Data source

- Information system providing a Service in the Estfeed system
- Can be either an Open or a Private Source
- Managed by an Organization (Estfeed system member)
- EIC codes
- Data exchange between network operator-supplier-market participant
- Calculations for settlement: suppliers aggregated volumes per grid areas

**NETWORK OPERATOR**

Submits per metering point:
- Hourly measured data, kWh
- Grid service agreement info

**ESTONIAN DATA HUB**

Submits authorization, granting access for measurement data, grid service and supply agreement information.

**SUPPLIER**

- Submits supply agreements information
- Receives measurement data for offers and actual settlement

**MARKET PARTICIPANT**
Estfeed

Data sharing platform designed for organisations and individuals in energy domain

- Different independent applications
- Different data sources
- Set of rules how data could be accessed
- Protocol

Existing infrastructure of secure data exchange

- Unified way of communication between organisations
- Standard set of security methods
- PKI and digital signatures for logs
Estfeed protocol

Unified protocol and format of the messages that are used to communicate with the Estfeed system
Administration application

- Registration of Members
- Registration of Mandates
- Configuration sharing to all members
Application

- System to consume Services it has subscribed to
- Mandates may be given to Application to allow the Application to access data.
- Managed by an owner Organization (Estfeed system member)
Example applications

• Amper
• Consumption aggregators
• Virtual power plant
• One stop shop for renewable producer
• Heat monitor
• Office building manager
• Central heating operator plant monitor
• Price package comparison
Customer portal

- User interface to create and revoke mandates
- Log monitoring
- Grid agreements
- Comparison to peer consumer group