

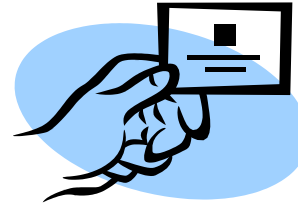
Estonian experience in energy domain

Kristo Klesment, Elering AS

Components Needed



Laws, regulations



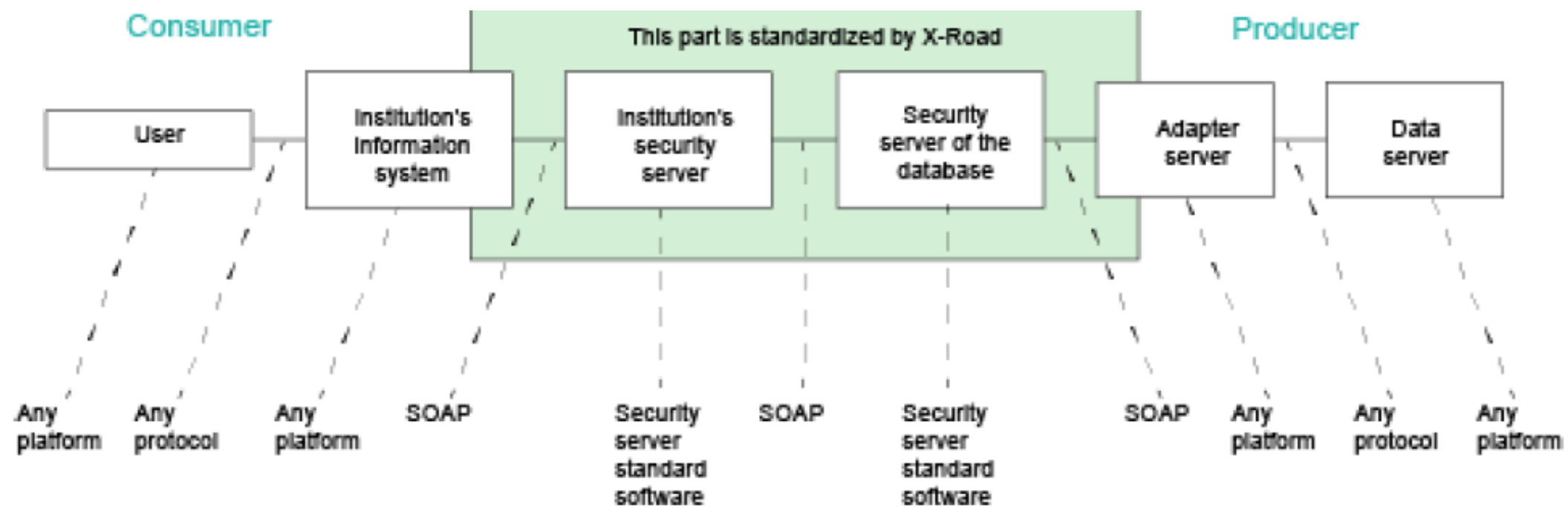
ID-Card, mobile ID



PKI Services



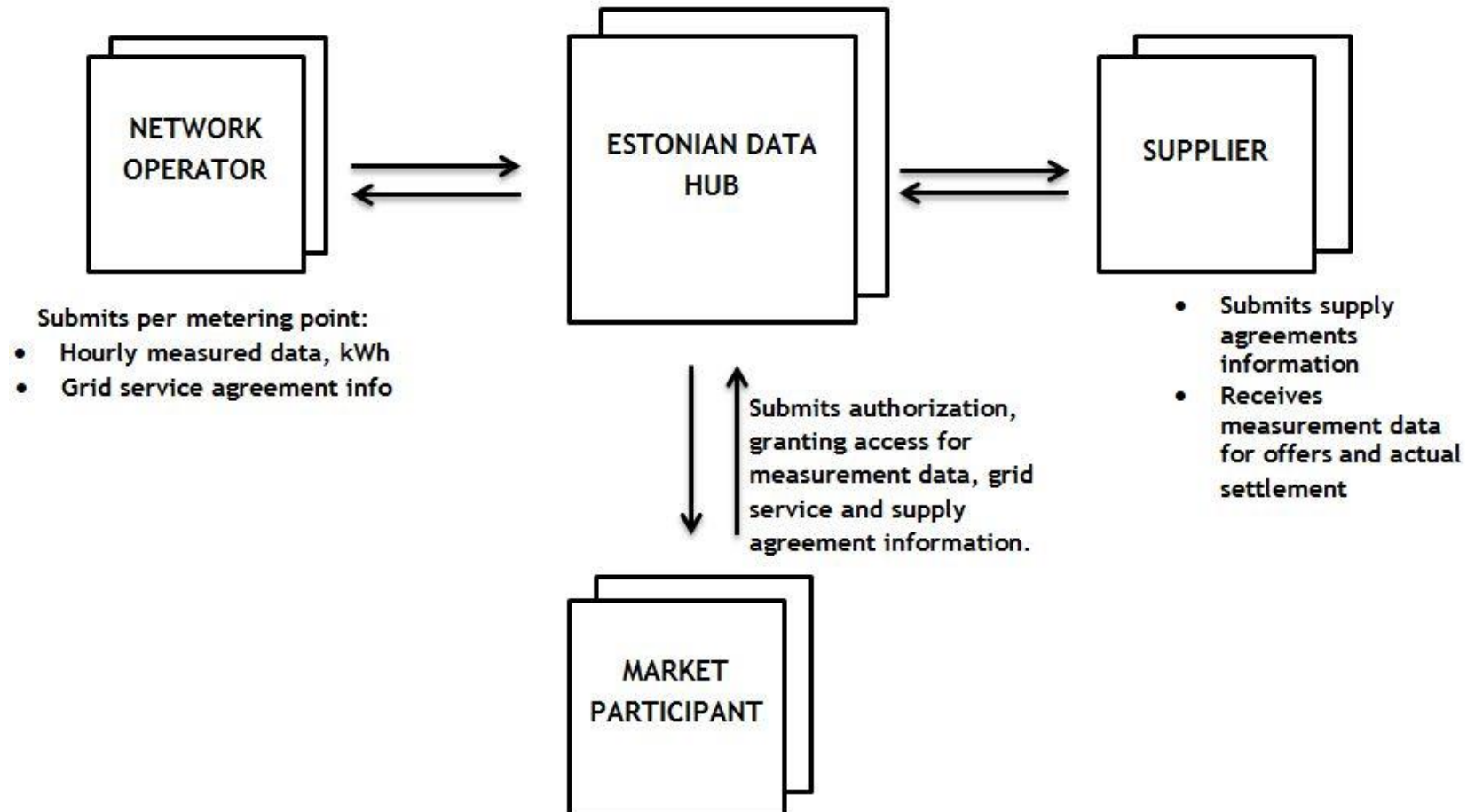
Digital Signature System



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



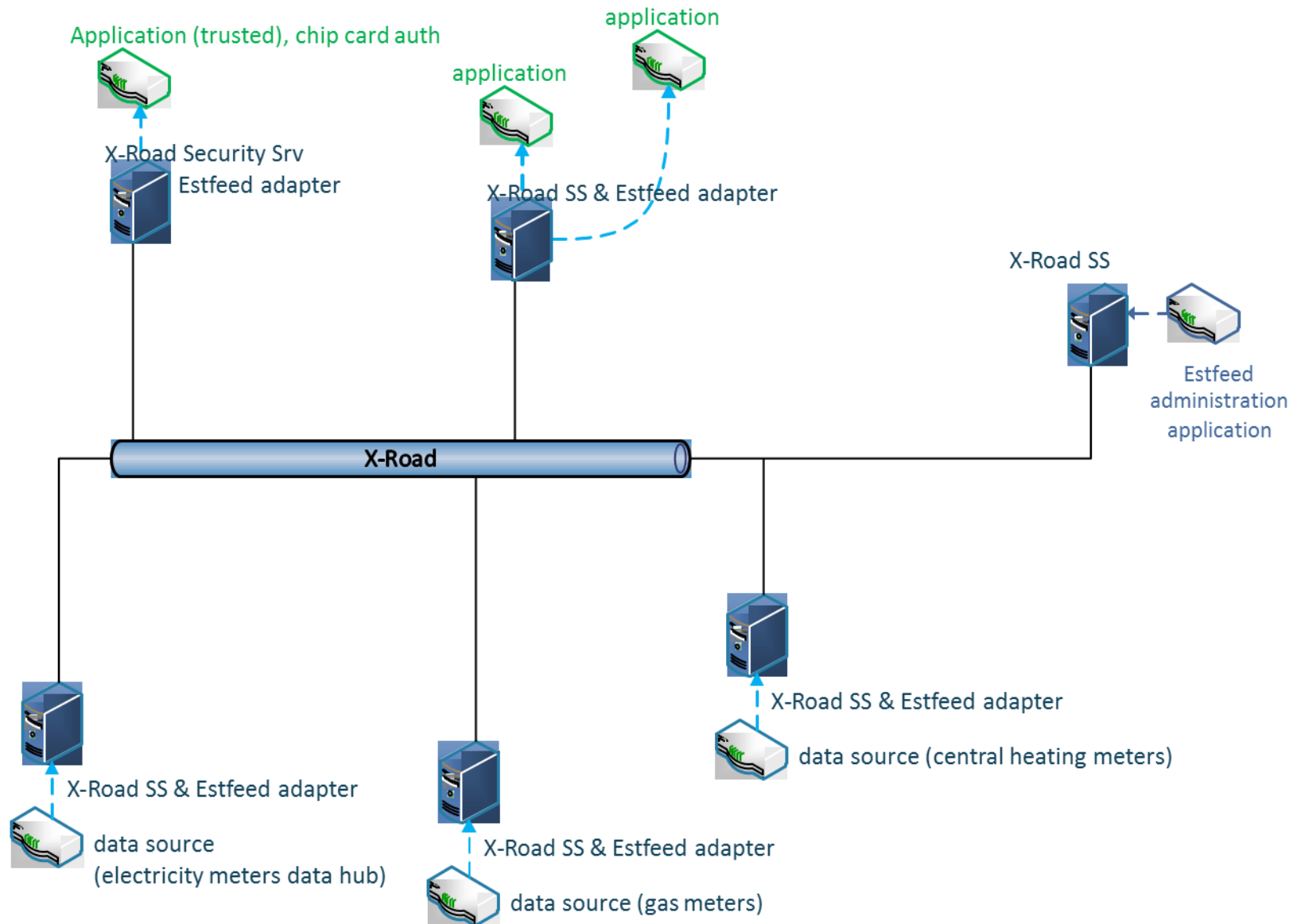
Estfeed

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

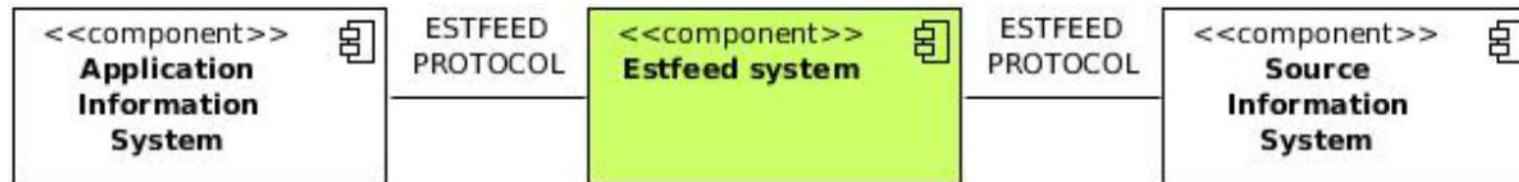
Existing infrastructure of secure data exchange

- 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

Sample layout

