

Electricity Market Roles Reference Model

EU Industry Days: Reference architecture cross-border and cross-sector energy data exchange

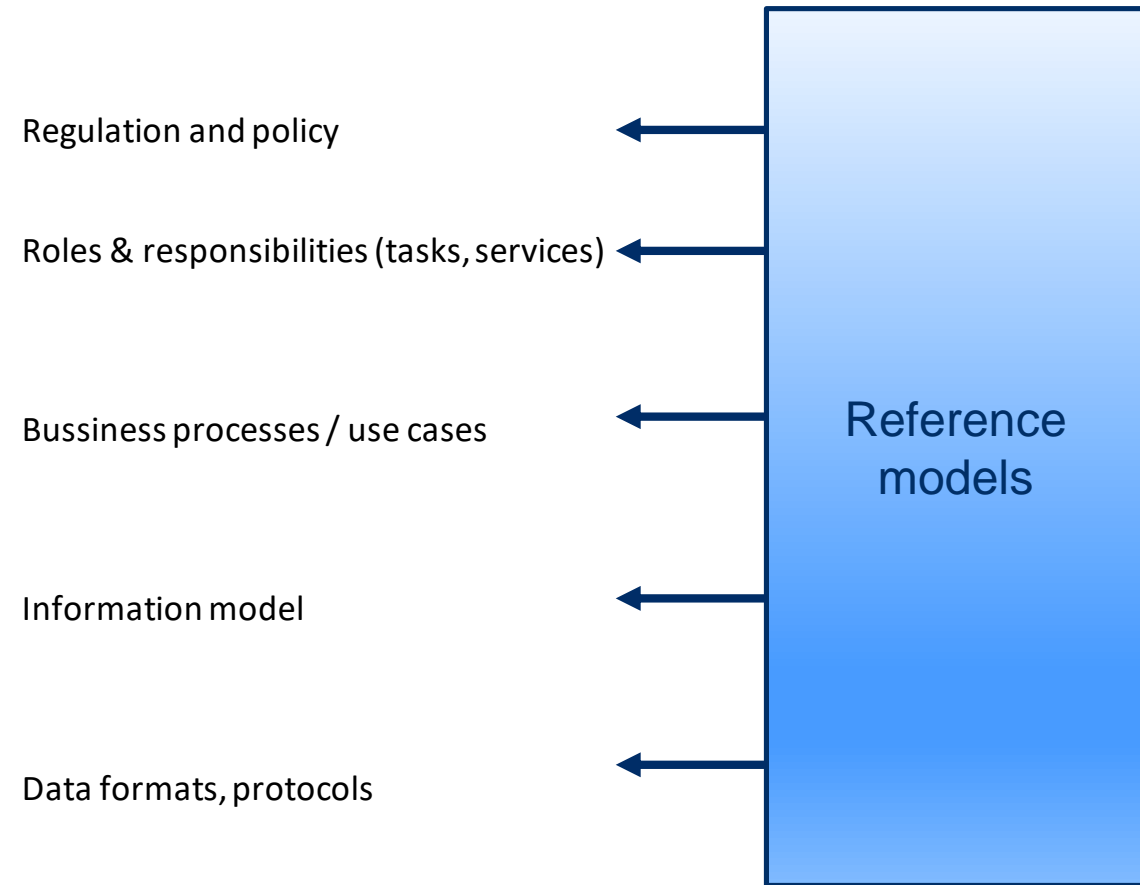
Lesław Winiarski, 26th March 2021





Reference models vs. interoperability

Reference models support interoperability and harmonisation of solutions for data exchange.



Source: European Commission (2017), New European Interoperability Framework





Harmonised Electricity Role Model as reference model for roles



Harmonised Electricity Role Model developed by ENTSO-E, ebIX®, EFET is a most recognised reference model for roles on European electricity market, designed for building information exchange solutions.

HERM ver. 2020/01 covers the roles used in Network Codes drafted by ENTSO-E, with guidance from the Agency for the Cooperation of Energy Regulators and other roles identified as relevant for information exchange on European electricity market.

Roles from HERM are used to design processes / use cases for data exchange on European electricity market. Set of Implementation Guides describing data exchange use cases using the roles from HERM has been developed by ENTSOE and is publicly available at ENTSO-E website.

Roles describing common responsibilities on electricity market are required to allow for cross-border and cross-sector data exchange between the interested parties, who play specific roles in the information exchange use-cases. The common (reference) set of roles allows for harmonised data exchange regardless the technical architecture for data exchange.





Examples of roles in HERM

| Harmonised Role | Definition |
|-----------------------------|--|
| System Operator | A party responsible for operating, ensuring the maintenance of and, if necessary, developing the system in a given area and, where applicable, its interconnections with other systems, and for ensuring the long-term ability of the system to meet reasonable demands for the distribution or transmission of electricity. |
| Grid Access Provider | A party responsible for providing access to the grid through an Accounting Point for energy consumption or production by the Party Connected to the Grid. The Grid Access Provider is also responsible for creating and terminating Accounting Points. |
| Party Connected to the Grid | A party that contracts for the right to consume or produce electricity at an Accounting Point. |
| Balance Responsible Party | A Balance Responsible Party is responsible for its imbalances, meaning the difference between the energy volume physically injected to or withdrawn from the system and the final nominated energy volume, including any imbalance adjustment within a given imbalance settlement period. |

