

High-Level Architecture Glossary

Description
In this glossary, the main functional capabilities are explained. Please see an overview of the LF Energy Functional Architecture for reference.

- [Glossary of Customer and Market](#)
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Glossary of Customer and Market

CUSTOMER RELATIONSHIP AND COMMUNICATION	Covering the digital functionalities supporting customer relationship management and communication.
CUSTOMER RESPONSE	Covering the digital functionalities supporting customers providing information.
MARKET PLATFORM GATEWAY	Covering the digital functionalities supporting market participants retrieving and providing information (e.g. providing energy consumption details to energy suppliers).
METERING AND COMPENSATION	Covering the digital functionalities supporting determination and financially handling realization of market contracts and consequences of system operation.

Glossary of System Management

FORECASTING	Covering the digital functionalities used to forecast Power system, Market and System variables or subjects to enable signaling, calculation and control (e.g. load forecast per substation).
MARKET SIGNAL	Covering the digital functionalities used to control system behavior targets like adequacy, balance and capacity.
POWER SYSTEM CALCULATION	Covering the digital functionalities used to calculate targets or variables related to power delivery and system stability.
SYSTEM CONTROL	Covering the digital functionalities used to control power delivery, system balancing, quality and stability.

Glossary of Asset Management

ANALYTICS	Covering the digital functionalities used to determine causes, draw conclusions and give advice (e.g. predicting fault locations).
ASSET INVESTMENT PLANNING	Covering the planning of the asset investments on strategic, tactical and operation level.
ASSET REPOSITORY	Covering the digital functionalities used to keep track of asset and asset related information and configuration.
ASSET SUPERVISION	Covering the digital functionalities used to determine asset status and replacement plans (e.g. using condition monitoring for predictive maintenance plans).
FIELDWORK MANAGEMENT	Covering the digital functionalities used to prepare and execute work with the right resources.
OUTAGE MANAGEMENT	Covering the digital functionalities used to prepare and execute planned and unplanned outages.

Glossary of Acquisition and Control

AGGREGATION NODE	Covering the digital functionalities of a regional hub (e.g. set of connected substations)
CENTRAL HUB	A central platform for data collection, monitoring and control equipment and nodes in the smart grid (e.g. SCADA or IoT platform).
CRITICAL EQUIPMENT	Assets that are vital for the grid (e.g. a line, circuit breaker or transformer).
DISTRIBUTED NODE	Covering the digital functionalities of a group of assets (e.g. bay, rail, circuit or group of bays).

EDGE NODE CONTROL	Covering the digital functionalities that are shared amongst all nodes .
EQUIPMENT NODE	Covering the digital functionalities of a single asset or a small group of the same assets (e.g transformer, set of three circuit breakers in 3-phase system or in case smart meter: a single electricity connection) or
INFRASTRUCTURE MANAGEMENT	A central platform management equipment and nodes in the smart grid remotely.
LESS-CRITICAL EQUIPMENT NODE	Assets that are non-vital for the grid (e.g. substation door).
SUBSTATION NODE	Covering the digital functionalities of a substation (e.g. high-voltage substation, mid-voltage substation or low-voltage substation).

Glossary of Shared

COMMON COMMUNICATION MEDIA	Covering the digital functionalities supporting emergency and crisis management.
DATA MANAGEMENT	Covering the digital functionalities supporting data retrieval and management.
IT MANAGEMENT	Covering the digital functionalities supporting IT systems, infrastructure and security management.
SYSTEMS GOVERNANCE	Covering the digital functionalities supporting systems monitoring, registering and healing to make sure that all systems together establish a grid that is stable, reliable and flexible.
UNIFIED OPERATOR'S UX COMPONENTS AND FRAMEWORK	Covering the digital functionalities supporting operators in their interaction with systems and stakeholders .