

PHASOR MEASUREMENT UNIT (PMU) & EDGE COMPUTING

a RESOLVD key exploitable result



DESCRIPTION

A wide area monitoring solution that provides increased observability of the LV grid & has edge computing capabilities

DEVELOPER



TARGET CUSTOMERS

DSO

PROBLEM ADDRESSED

Infrastructure over-dimensioning to withstand worst case energy provision requirements. This is due to lack of observability of the LV grid

VALUE PROPOSITION

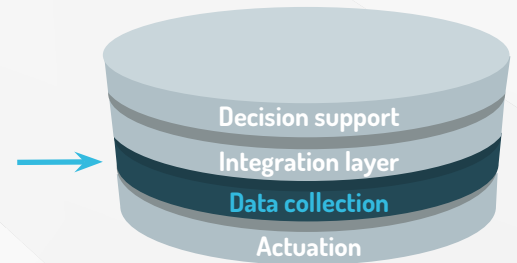
The PMU based solution allows for real-time monitoring, protection, and control of power grid. This allows to operate closer to the margin and react to network disturbances.

RELEVANT STANDARDS

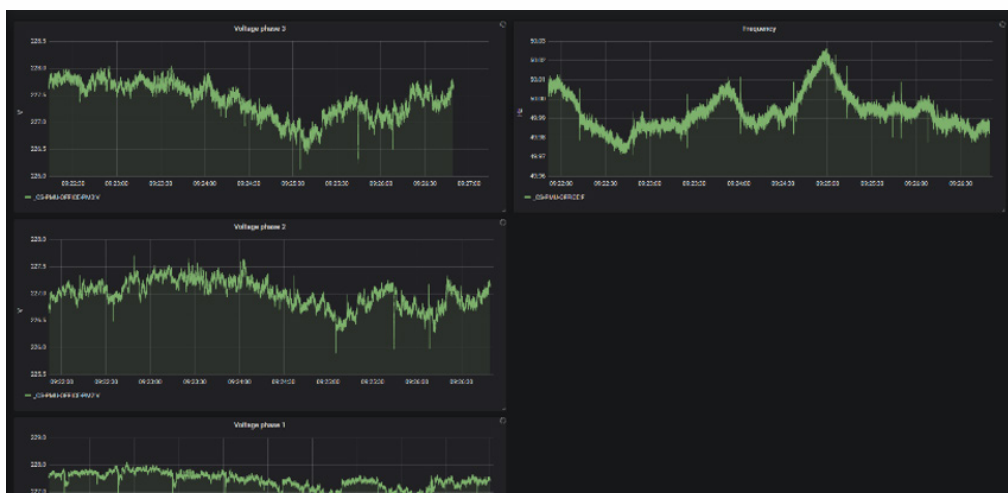
IEC 60255, IEC 60068, IEC 61000, EN 301 489-1/19

EXPLOITATION AMBITION

COMSENSUS seeks a partnership with a distribution management system provider to commercialise technology



Where the PMU fits in the RESOLVD solution, see model on page 2





RESOLVD

Next generation LV grid management

WHY IS THIS RELEVANT TO YOU?

The RESOLVD H2020 project is a 42 month Research & Innovation project that proposes hardware and software technologies that address European DSOs challenges in accommodating an increased presence of renewables in LV grids.

With the project now coming to a close, a consortium of leading institutions and technology developers have developed the next generation solutions to meet tomorrow's challenges and these are being tested in a real-life pilot in Catalonia, Spain.

DSO CHALLENGES

Fault detection and self-healing

Low resolution grid observability

Congestion and voltage compliance

Uncontrolled islanding

Continuity of supply after fault

Power quality issues

Technical power losses

Cyber Security

Technical power losses

THE RESOLVD SOLUTION

INTEGRATION LAYER

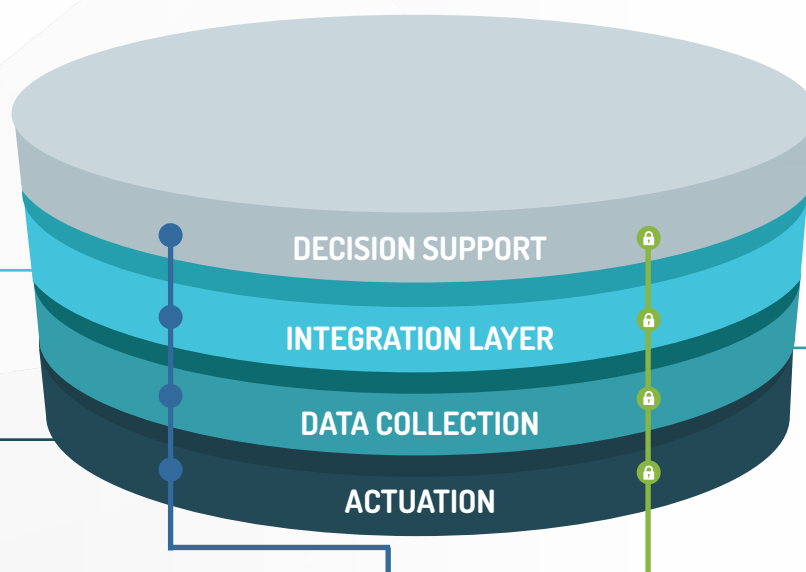
Enterprise Service Bus (ESB) and Data Management Platform - Integration middleware software that facilitates interaction among various software applications and manages data exchange, analytics and visualisation.

ACTUATION

Power electronic device (PED) Integrates multiple battery types and manages their dynamic energy and power flows.

CONTACT

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RESOLVD BRINGS INNOVATION AND CYBER SECURITY IN THESE LAYERS

DECISION SUPPORT

Low-Voltage Distribution Decision support toolkit (LVD-DST) - A suite of web services that provides enhanced energy monitoring and scheduling capabilities.

DATA COLLECTION

Phasor measurement unit (PMU) & edge computing - A wide area monitoring solution that provides increased observability of the LV grid & has edge computing capabilities
Smart Gateway to measure power quality in the buildings or charging areas and communicates to 3rd party.

