

**MONITOR BT PILOT PROJECT:
COMBINED VOLTAGE REGULATION APPROACH
FOR LV GRIDS WITH PV PENETRATION**

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ABSTRACT

Monitor BT project aims at improving LV grid resilience by combining LV grid sensors and smart meter information to enable grid awareness, providing an innovative method for voltage regulation under PV generation presence. Monitor BT communications open architecture comprises IEEE 802.15.4 RF Mesh for the LV grid sensors and PLC PRIME / GPRS / RF Mesh for smart meters.

For the validation of the communication architecture, the fault detection and location, and the grid voltage control methodology, a field project demonstration is under deployment involving LV clients from two MV/LV substations and a set of feeders, including public lighting.