



ACCELERATION PROGRAM 2026



AREA: Electricity distribution network

CHALLENGE: New digital services for low voltage network

How could we leverage the **digitalization of the low-voltage network** (including broadband PLC) to **enable new scalable digital services**—based on data and, where it adds value, on the control/orchestration of behind-the-meter assets—while **ensuring distributor neutrality, security and privacy**, and facilitating **value creation** for third parties and for the power system?





NEW DIGITAL SERVICES FOR LOW VOLTAGE NETWORK

Why this challenge matters

The new generation of smart meters with broadband PLC communications is turning the low-voltage network into a far more capable digital infrastructure: it increases the frequency and quality of data, enables bidirectional communication with lower latency, and improves interoperability, making it possible to scale services across a massive number of supply points. At the same time, the power system is moving toward a more distributed, electrified, and digital model (self-consumption, storage, electric vehicles, and new flexible loads), which requires smarter, more coordinated data-driven management—especially at the LV level, where many of these assets are deployed and where operational constraints often emerge.

Current context

We now have a new “digital layer” in the LV network that goes beyond remote metering and opens the opportunity to turn the grid into a platform enabling scalable digital services (Data-as-a-Service, facilitation of distributed flexibility, and—where it adds value—orchestration of behind-the-meter assets). The challenge is to do so while preserving the distributor’s neutral role: the goal is not to compete with retailers or aggregators, but to help them operate more effectively through data, APIs, and robust measurement and verification (M&V) capabilities, ensuring security, privacy, and regulatory viability.





DIGITAL SERVICES FOR LOW VOLTAGE NETWORK

¿What are we looking for?

We are looking for proposals that turn the digitalization of the LV network (including broadband PLC) into a platform enabling scalable digital services, particularly focused on data and—where it adds value—on the management/orchestration of behind-the-meter assets and distributed flexibility, as a technology layer that allows third parties (retailers, aggregators, ESCOs, etc.) to deploy services with higher quality and less friction.

Priority areas:

- **Behind-the-meter asset management:** monitoring, control, or orchestration of end-customer assets (self-consumption and inverters, batteries, EV chargers, HVAC/heat pumps, and flexible industrial loads), with a focus on scalability, interoperability, and integration.
- **Distributed energy flexibility:** identification and quantification of flexibility, controlled activation, and—above all—robust M&V (baselines, activation, verification, and auditing) to enable trusted local or aggregated services.
- **Advanced energy data services:** analytics, forecasting, anomaly and event detection, power quality indicators, and data APIs/services for third parties (including Data-as-a-Service models).
- **Alignment with the distributor's role:** proposals that are regulatory-viable, non-discriminatory, and that preserve distributor neutrality and collaboration among actors.