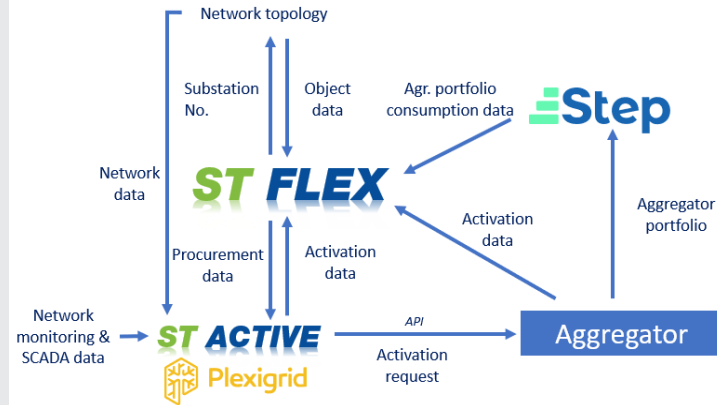


SUCCESS CASE 8.2026

ST FLEX

DSO "SADALES TĪKLS" DISTRIBUTION NETWORK FLEXIBILITY



CHALLENGE

Most businesses, as well as households, generate part of their electricity and heat locally using solar panels, electricity storage systems, heat pumps and energy community solutions.

Electricity consumption is highly efficient and automated – devices, electric vehicles and heating dynamically adjust consumption in line with market price signals.

INSTALLED GENERATION CAPACITY: + 600%

ELECTRICITY CONSUMPTION: + 67%

**compared to 2024*

APPLICATION

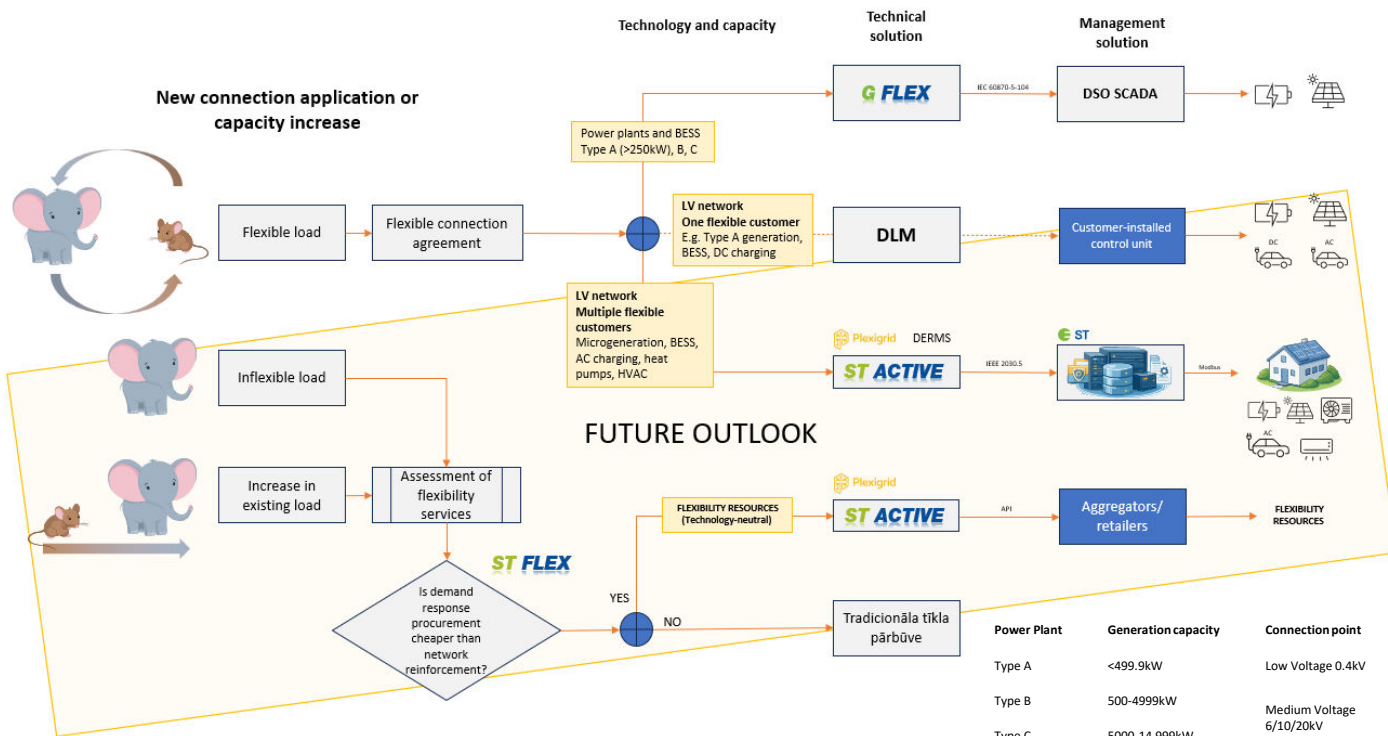
Scenario I: The customer requires a new electricity or power plant connection at a location with no available hosting capacity and customer's load is not flexible.

SOLUTION

1. DSO "Sadales tīkls" announces a procurement of flexibility services on the ST FLEX platform – a while-label software developed in-house.
2. Aggregators register the flexibility resources available to them.
3. Following a successful procurement, DSO «Sadales tīkls» concludes a contract with one or more aggregators for the provision of flexibility services in the congested area.
4. ST ACTIVE provides network monitoring and overload forecasts, informing the aggregator (via API) when and to what extent demand response activation will be required.
5. The aggregator provides demand response using its customers' flexibility resources.

Scenario II: An increase in the power consumption of existing customers or changes in their consumption profile, resulting in a risk of network congestion.





KEY SUCCESS FACTORS

- ✓ Long-term network development planning for Years 2030 and 2035
- ✓ Identifying future network constraints
- ✓ Delivering techno-economic analysis congestion resolution options

MAIN ACHIEVMENTS

DSO

- ✓ Reduced capital costs and investment by postponing or replacing network reinforcement.
- ✓ Increased connected consumption and generation capacity within the existing network infrastructure.
- ✓ Voltage quality compliance with the requirements of LVS EN 50160.

Customers

- ✓ Lower connection costs, as DSO provides the connection without network reinforcement at a location with insufficient available capacity.
- ✓ Faster connection process.
- ✓ In the Flexibility services scenario – additional revenue from providing demand response.

WAY FORWARD

ST FLEX

ST ACTIVE

DLM

G FLEX

2026

Flexibility services market with DSO procuring customer demand response for peak load management

Management of customer end devices and generation in the low-voltage network without DSO SCADA integration

Autonomous generation and flexible consumption management at low voltage

Integration of A (>250kW), B- and C-type generation into DSO SCADA and its management to maximise the generated volume to be delivered to the network

Growth in electrification
Installed generation capacity