

Renewable penetration levered by Efficient Low Voltage Distribution grids



# Pitch 6: RESOLVD as complete solution for LV smart grid management

Presenter: Isidoros Kokos Intracom Telecom (ICOM)



## Short presenter's bio



#### **Isidoros Kokos**

Diploma in Electrical and Computer Engineering (2008) & MSC in Energy Production & Management (2010) from NTUA, Athens

R&D staff of Intracom Telecom since 2015; engaged in research and innovation projects under the umbrella of Smart Grids; leading technical analysis, design and implementation activities of software solutions in the domain.

A global telecommunication systems & solutions vendor operating for over 40 years in the market. In the Smart Grid's domain it offers turnkey solutions for the DSOs (e.g. AMI, SCADA) and is actively engaged in research and innovation activities for the transformation of the energy industry.





### Challenge



Integrate individual offerings of RESOLD project for the optimal management of the distribution grid, through the envisioned services:

- Monitoring technologies (i.e. WAMS, Forecasting)
- Controllable assets technologies(i.e. PED/Storage)



Introduce new elements of monitoring/control in existing operational technologies of the control center "bypassing" integration complexity & costs



#### Solution

Optimization algorithms tackling different business objectives, leveraging monitoring solution and controllable assets





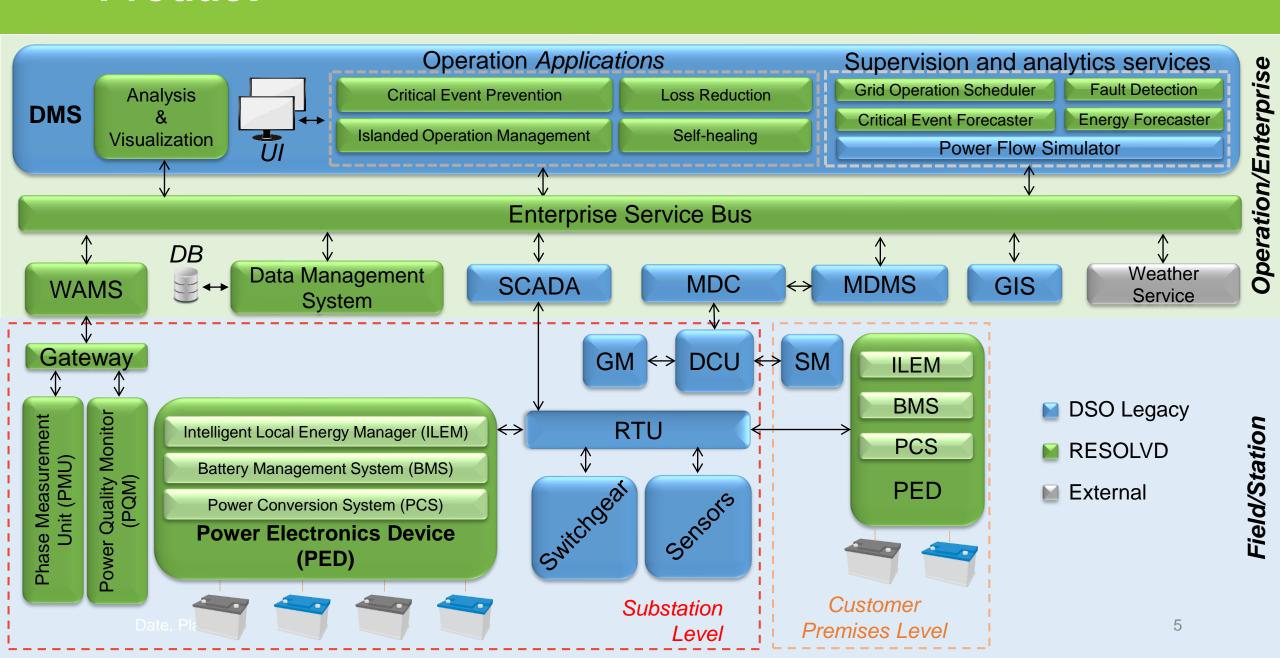
Integration solution for enabling communication with existing systems of the control centers (i.e. MDMS, GIS) and new technologies.

User interface for intuitive monitoring & control

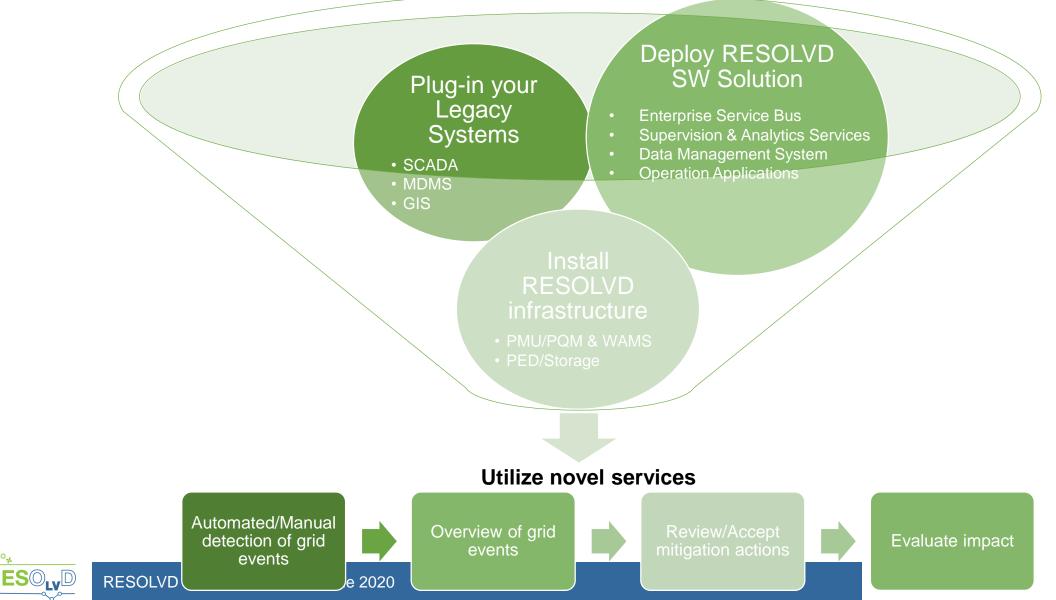




#### **Product**



#### **Product**



## **Competitive Advantage**

Interoperability by design: driven by domain standards (e.g. SGAM, CIM) facilitation integration with existing systems of the control center

Extensibility: Third-party services (e.g. analytics) can be easily integrated

State-of-the-art: Utilize flexibility in the active management of the distribution grid

Cybersecure solution: Use of best practices in the design of the solution through Threat Modelling & Risk Assessment



### **Exploitation pathway**



#### Replicability:

Further <u>experiences in other DSO</u> case studies



#### **Evolution:**

- Introduce flexibility market vs. direct controllability of assets
- Introduce controllability of EV assets
- Automated control/validation of switchgear status



## Demo



