WiseGRID Cockpit

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Introduction

- **Target users**: Distribution Systems Operator or Microgrid Operators
- **Objective**: control, manage and monitor their own grid, improving flexibility, stability and security of their network, considering an increasing share of distributed renewable resources
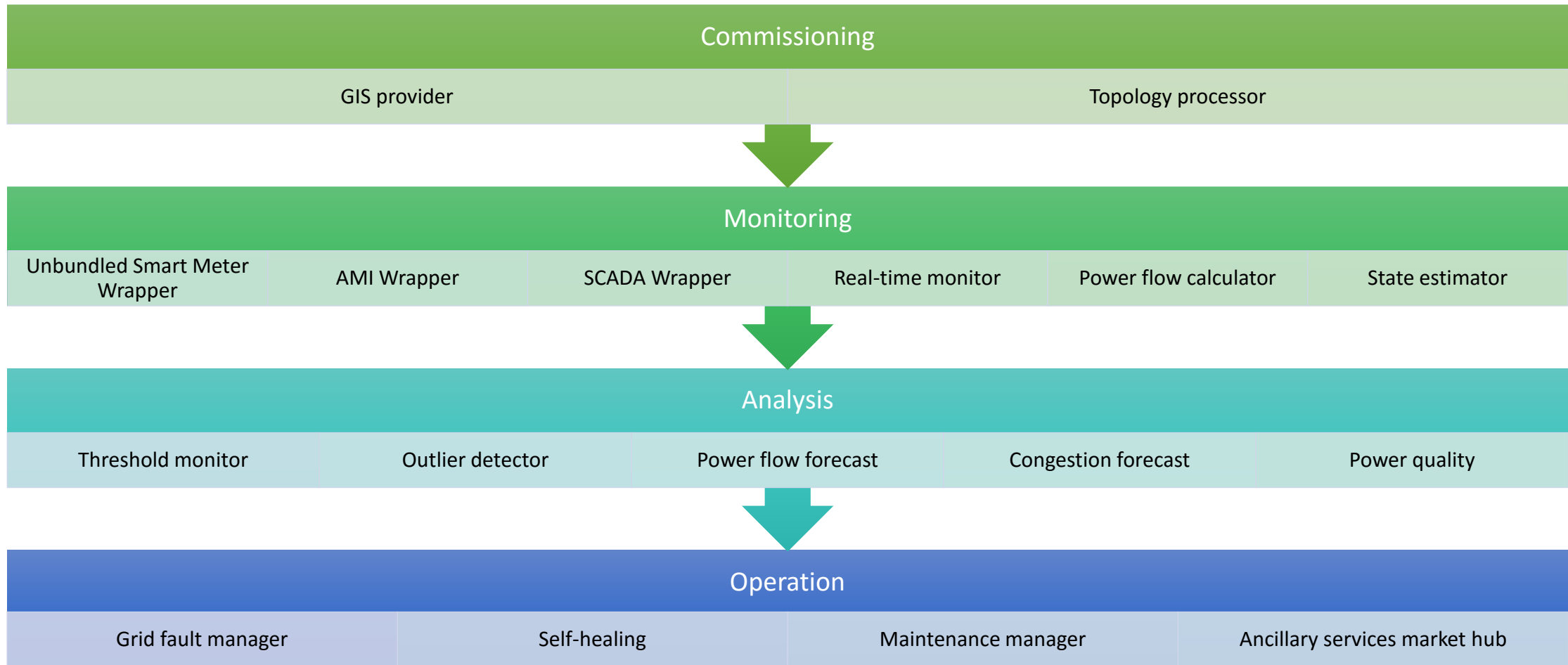
Challenges

- **Integration of several information sources**
- **Gaining insight on grid trends**
- **Increase observability of the grid**
- **Active participation of other actors**
- **Support maintenance operations**

Features

Commissioning	
GIS provider	Topology processor

Monitoring				
Unbundled Smart Meter Wrapper	AMI Wrapper	SCADA Wrapper	Real-time monitor	Power flow calculator	State estimator

Analysis				
Threshold monitor	Outlier detector	Power flow forecast	Congestion forecast	Power quality

Operation			
Grid fault manager	Self-healing	Maintenance manager	Ancillary services market hub

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Commissioning

- **Common Data Models for information integration**
  - **Common Information Model (IEC61968)**
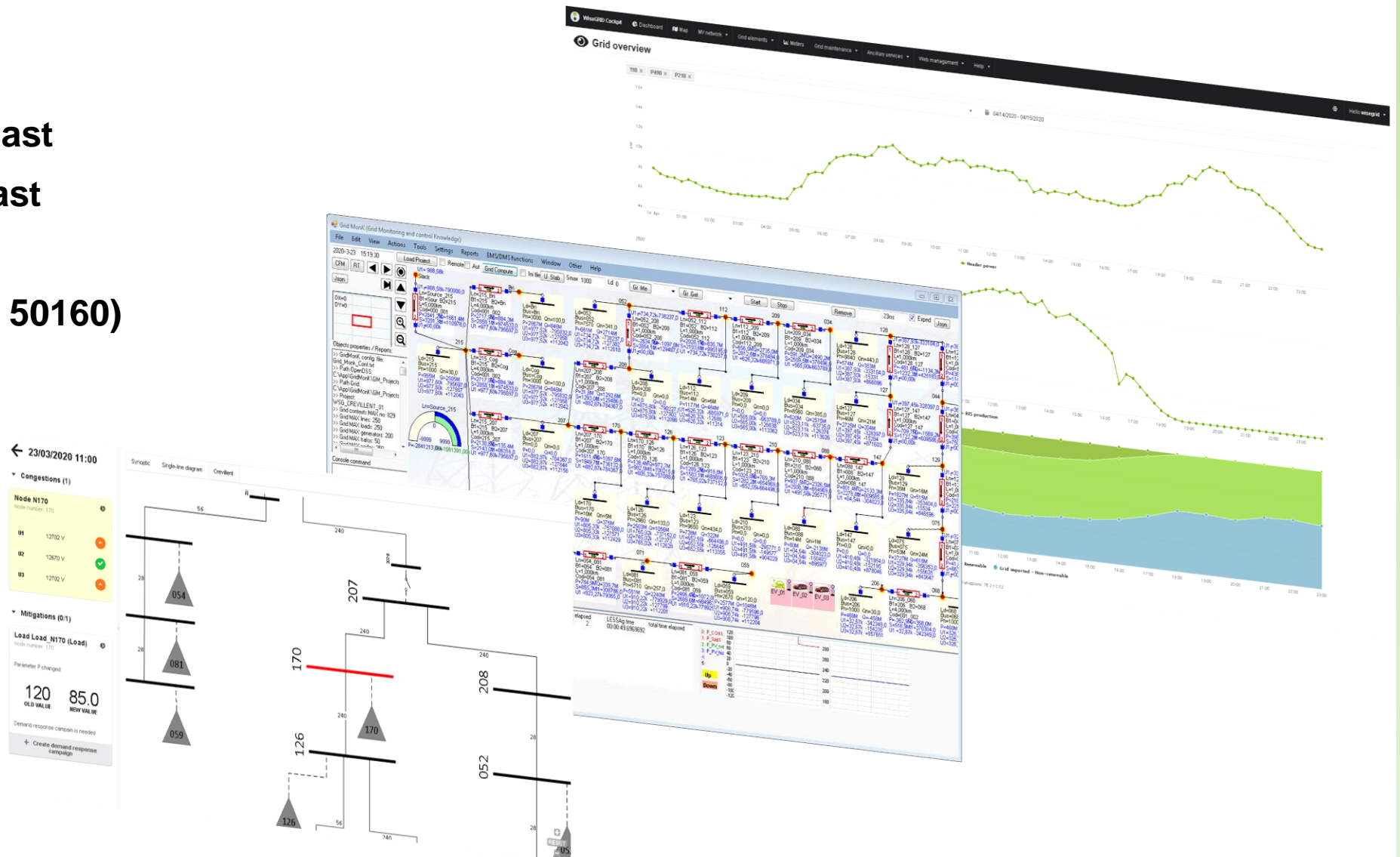 - **GeoJSON**
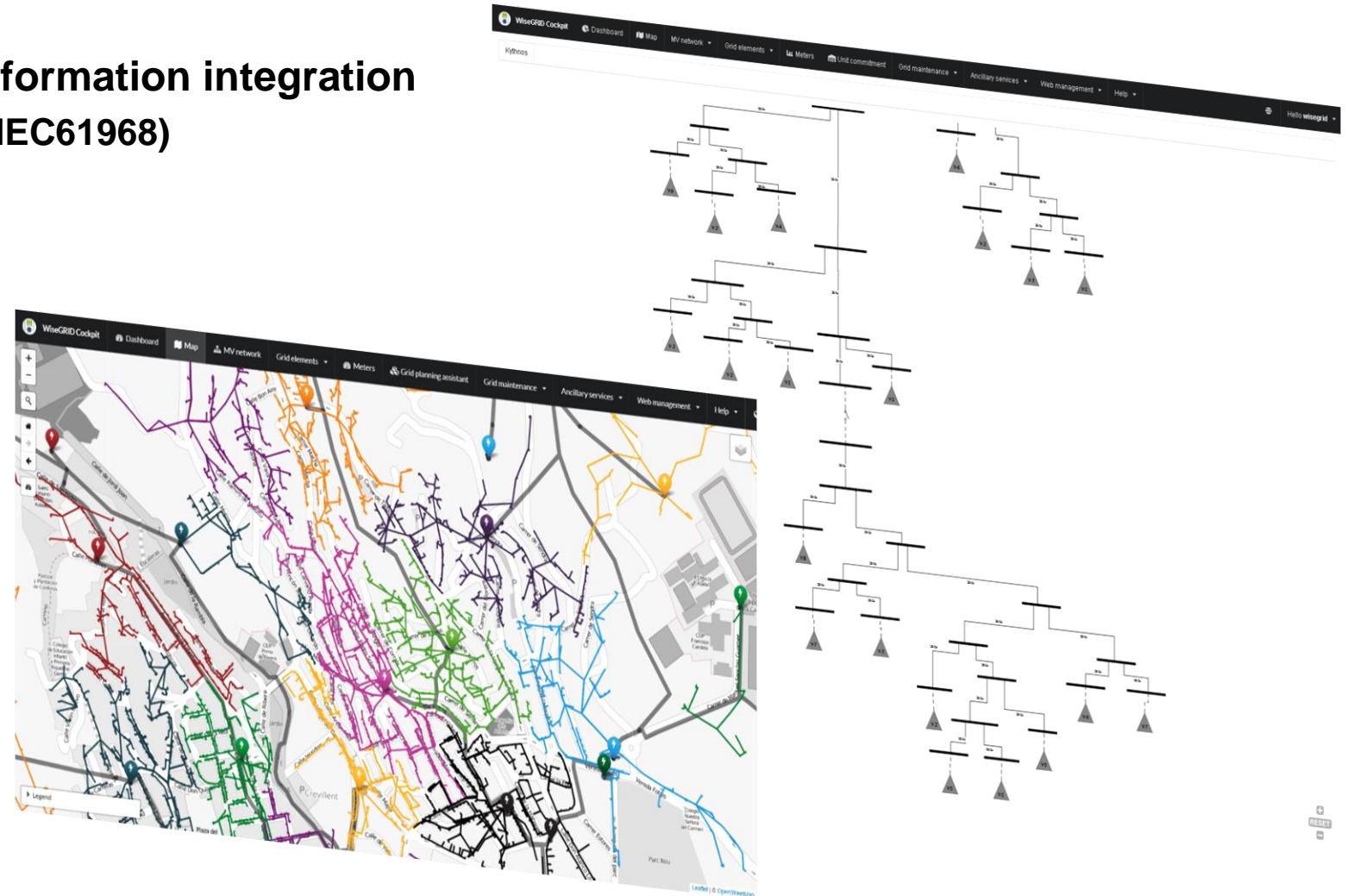
Monitoring

- **884 metering points in 4 pilot sites**

- **Data rate 5s – 15m**

- **4 Power flow / State estimation models**
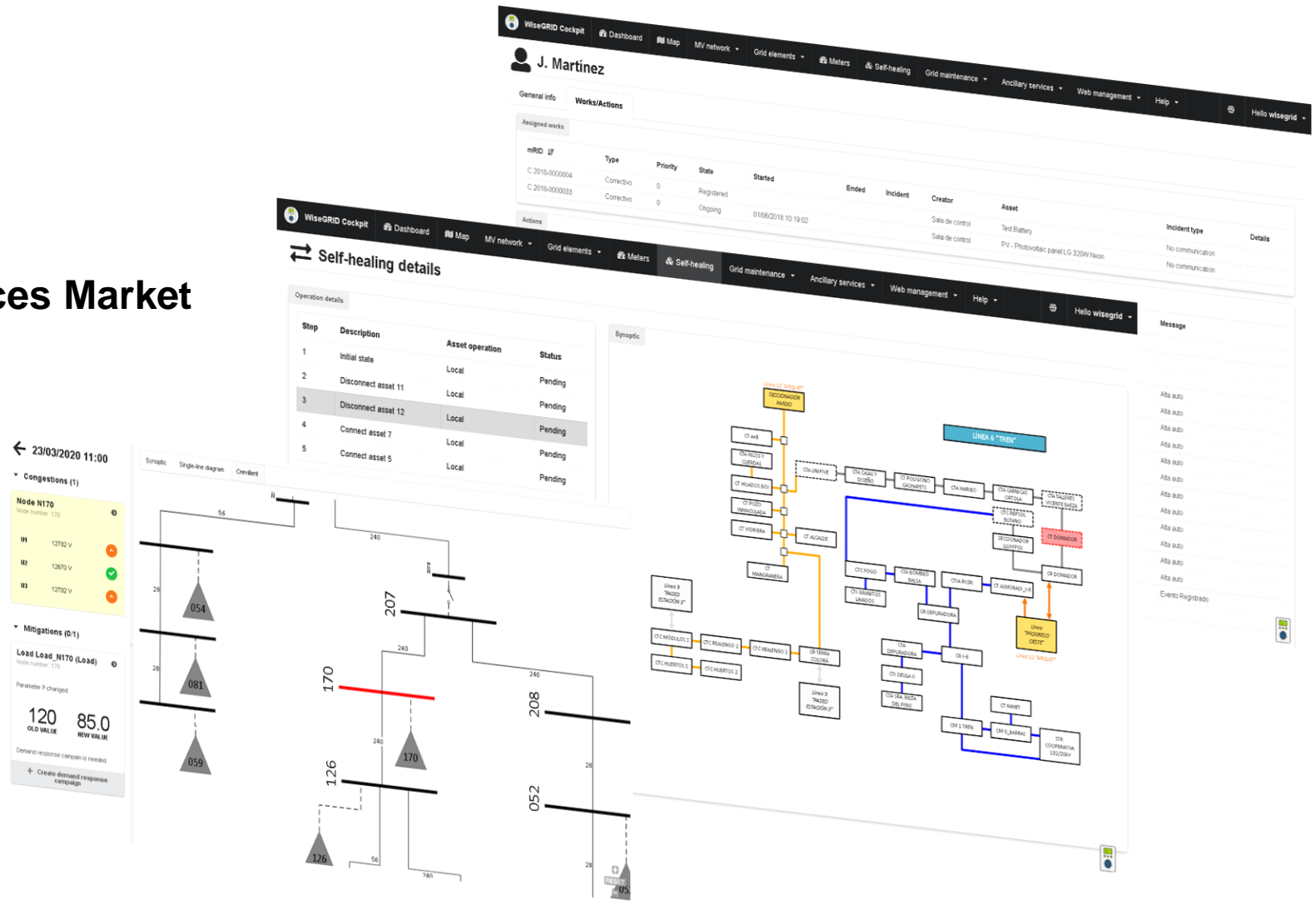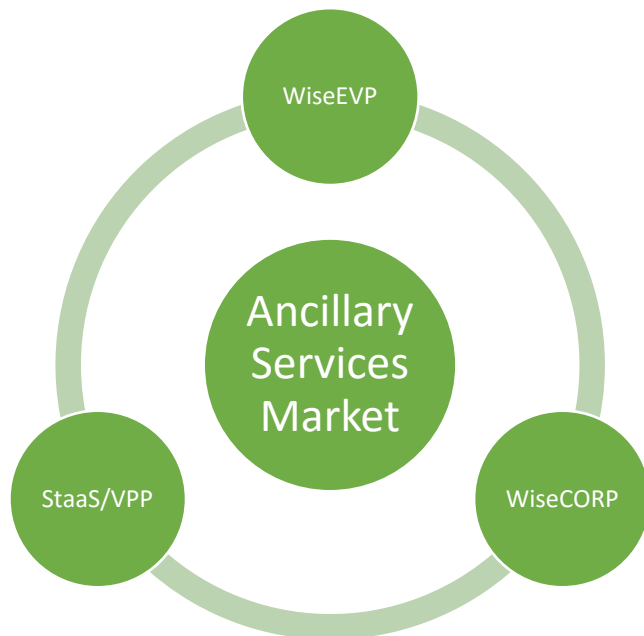 - 549 MV buses

- **KPI analytics**

Analysis

- **Power flows forecast**

- **Congestion forecast**

- **Stream analysis**

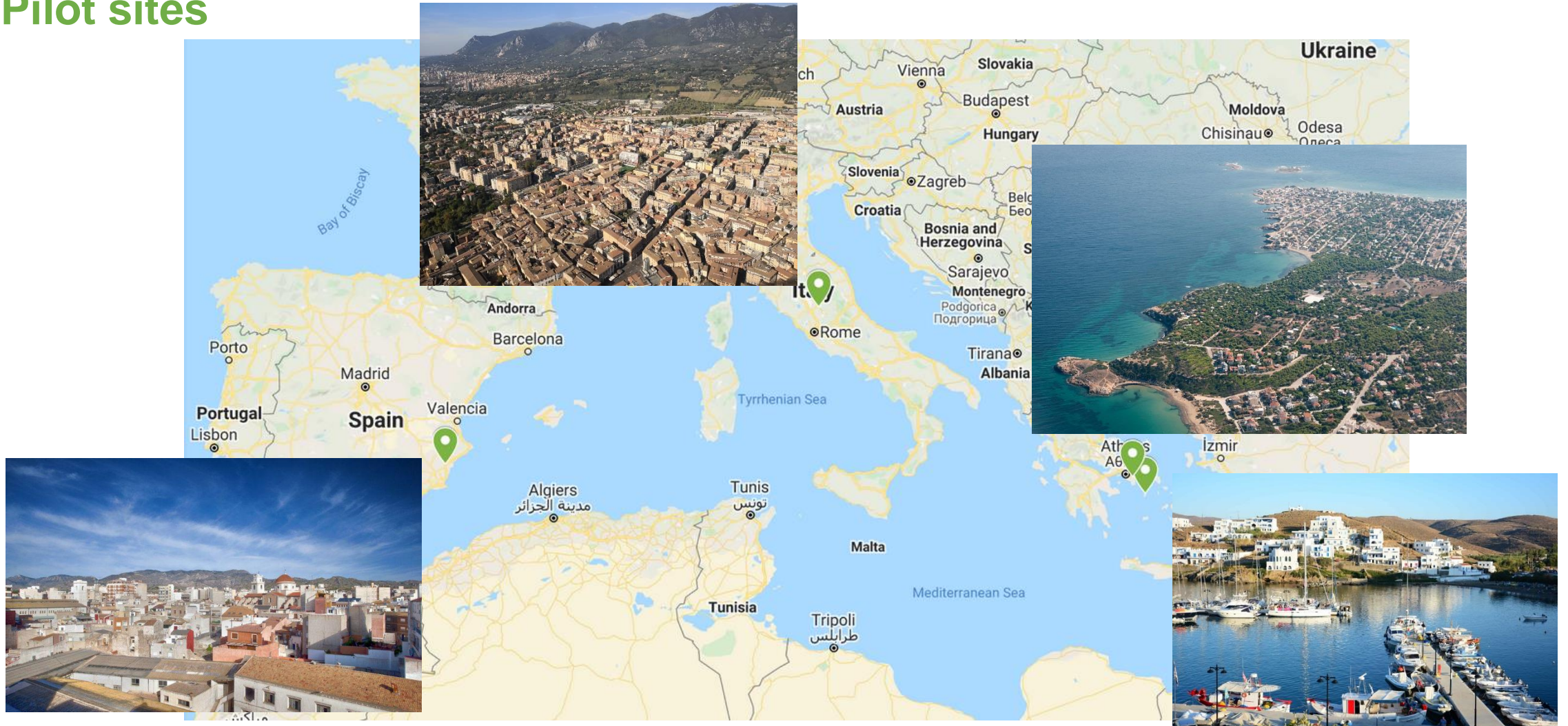- **Power quality (EN 50160)**

Operation

- **Grid Fault Manager**
- **Self-healing**
- **Maintenance**
- **(Distribution) Ancillary Services Market**

Pilot sites

Demo

Thank you!

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