

OneView® Park Retrofit

Das SCADA Ersatz System für Windparks mit bis zu 10 WEA

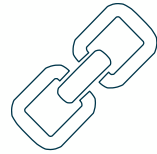
Frank Riemer – Sales Director D-A-CH
Potsdam, Windenergietage 2021

We are SCADA International

Gegründet 2006

SCADA

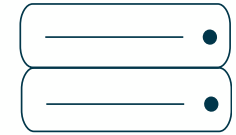
Supervisory Control
And Data Acquisition



The complete
SCADA value chain



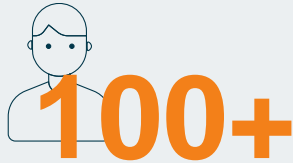
Danish heritage



1st & 2nd level
SCADA pioneer



Turnkey solution
provider



Skilled SCADA
specialists



Countries with
projects



SCADA solutions
installed

Agenda

- Warum muss das SCADA System überhaupt getauscht werden
- Herausforderungen bei der Kommunikation mit der WEA-Steuerungen
- Eigenschaften OneView® Park Retrofit
- Available drivers
- Schaltschrank

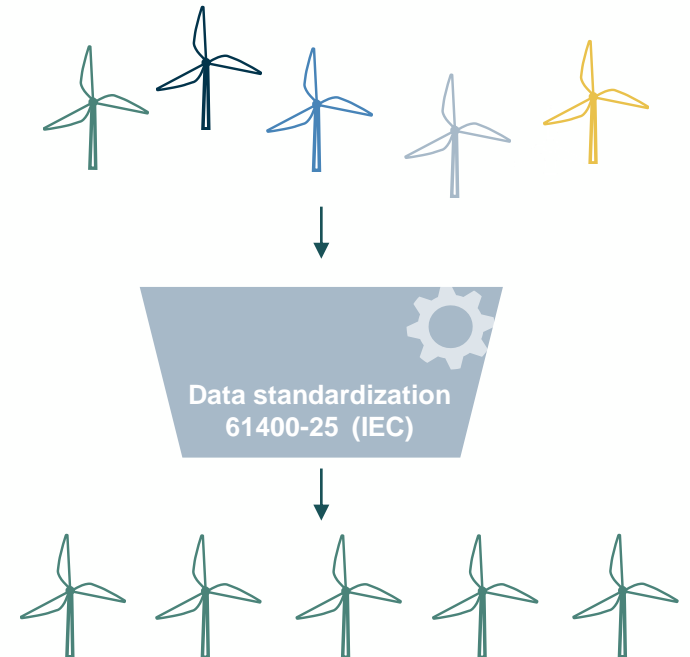
Warum das SCADA System austauschen?

- Stellen Sie regelmäßig System-Abstürze fest?
 - Auch Industrie PCs haben eine Laufzeit von max. 7-10 Jahren.
- Mangelhafte Daten und Datenlücken?
 - Mehr Möglichkeiten der Datenanalyse, LPP reduzieren
- Wollen Sie komplett unabhängig vom OEM werden?
- Neue Herausforderungen
 - Datenexport an 2nd Level SCADA, GUI nicht mehr zeitgemäß
 - BNK, DVM mit Sollwert, Einspeisemanagement mit Sollwert

Dies sind alles Anzeichen das bestehende Park-Scada zu ersetzen!

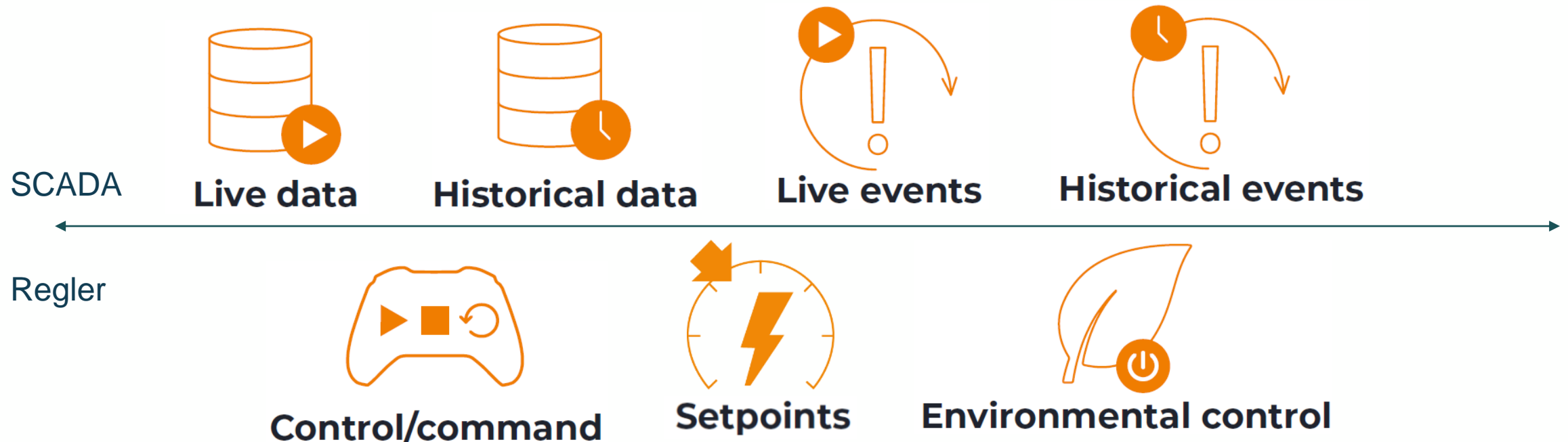
Herausforderungen bei der Kommunikation Direkt mit WEA-Steuerungen verschiedener Hersteller

1. All OEMs have their own way of communicating between the SCADA system and the controller in the turbine
 - I. Different communications protocols
 - II. Different controller types
 - III. Different controller software versions
 - IV. Different hardware interfaces
2. Number of data points
 - I. Live
 - II. Historical - some controllers do not have historical data
 - III. Mapping of turbine data according to IEC 61400-25
3. Lack of OEM documentation
 - i. Data points (description, scaling, SI units)
 - ii. Alarms/Events
4. Software updates from OEMs
5. Network configuration and setup
6. Mapping of turbine data according to IEC 61400-25 & Categorization of alarms according IEC 61400-26



Eigenschaften OneView® Park Retrofit

OneView® Park Retrofit ist eine Kombination aus Park-SCADA und Parkregler. Kostenoptimiert speziell für die Anforderungen von kleinen Parks



Live data and events



- Remote monitoring of turbine sensors every second for immediate overview
- Monitor alarms, warnings, service maintenance of the turbine
- ✓ Fast reactions towards unexpected events
- ✓ Reduce downtime and production losses



Historical data and events



- Stored 10 minutes live data to be used for reporting
- Historical record of the turbine performance including all alarms and warnings
- ✓ Reduced cost of maintenance due to planned services and stops
- ✓ Optimize service based on recurring service problems and ensure OEM warranties

Control and command



- Start, stop and reset the wind turbine
- ✓ Optimize production through reduced reaction time on alarms



Setpoints



- Control the output of the turbine power, by restrictions and limitations
- ✓ Control asset power production
- ✓ Comply to grid regulations

Environmental control

- Control the turbine according to environmental regulations
- ✓ Comply to noise and shadow flicker regulations and weather conditions



Environmental control



- Control the turbine according to wildlife regulations for bats and birds
- ✓ Adapt to migratory animal movements and weather conditions

+45 Drivers verfügbar

To be reengineered for direct communication to turbines or controllers, examples:



Schaltschrank



Breite 600* Höhe 760* Tiefe 350

Main components in cabinet are:

- IPC for running SQL, OneView software, client login etc.
- Wago controller for park control, active and reactive power.
- UPS for safe shutdown
- 24 VDC Power supply
- Heater, Fan and thermostats for climate control inside cabinet
- Field wiring terminals
- Firewall (Optional)

Learn more about the benefits of

OneView[®] Park

Retrofit

at www.scada-international.com