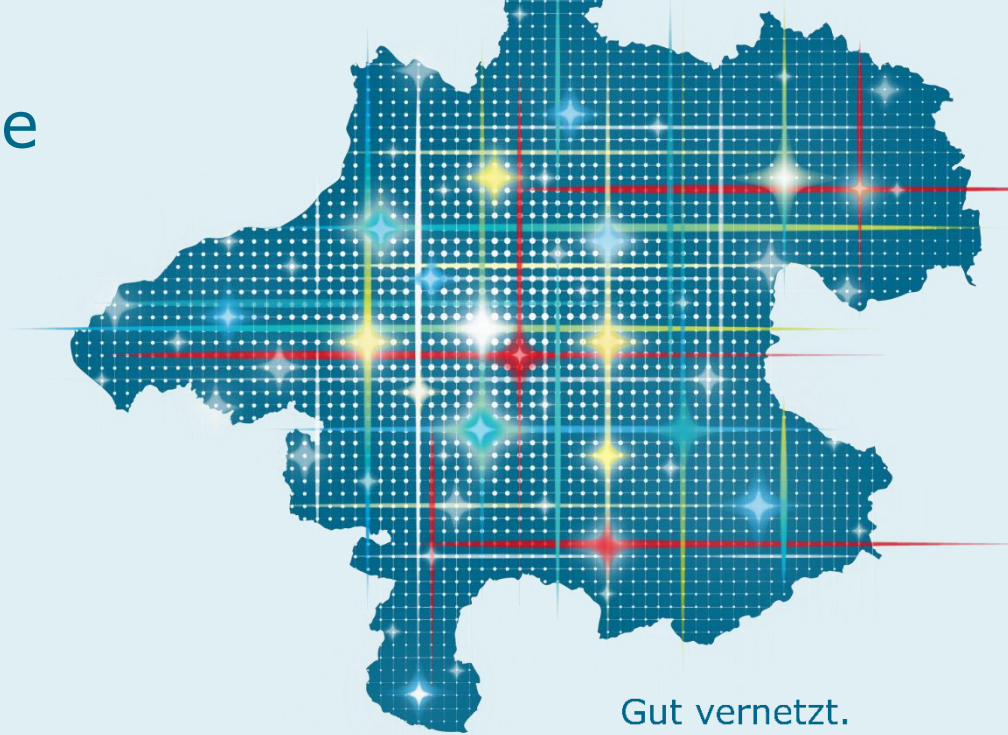
Digital Customer Interface Austria

OpenADR 3.1



Gut vernetzt.
Bestens versorgt.

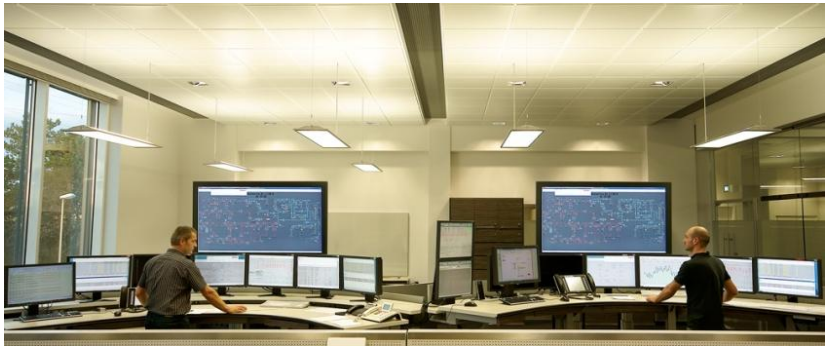
Leo Fiedler – Department Grid Control

04.03.2026

NETZOÖ
Ein Unternehmen der Energie AG

Netz Oberösterreich GmbH

- Combined Grid Operator Electricity + Natural Gas
- 700 employees
- 650.000 Metering Points Electricity
- 65.000 Metering Points Natural Gas
- Power Grid 33.000 km
- Gas Grid 5.600 km
- Turnover 570 MEUR



New regulations by law

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- ElWG § 76
  - (1) Operators of new and significantly modified power generation plants with a grid-connected capacity of 3.68 kW or more shall be obliged to equip their plants with a **technical device for controllability** from **1 June 2026**. The **technical device** must have a **standardised interface**, to be defined in more detail in the technical and organisational rules for grid operators and users. The costs of equipping the plant with a technical device for controllability shall be borne by the operator.

  - (2) The **grid operator** shall ensure the **operational controllability** of the installations in accordance with paragraph 1 by no later than
    - 1. 1 June 2028 for electricity generation installations with a grid-connected capacity of more than 25 kW,
    - 2. 1 June 2029 for electricity generation installations with a grid-connected capacity of more than 3.68 kW up to and including 25 kW, and
    - 3. 1 January 2030 for power generation plants with a grid-connected capacity of more than 0.8 kW up to and including 3.68 kW at the request of the plant operator, provided that these are equipped with a technical device for controllability within the meaning of this provision.

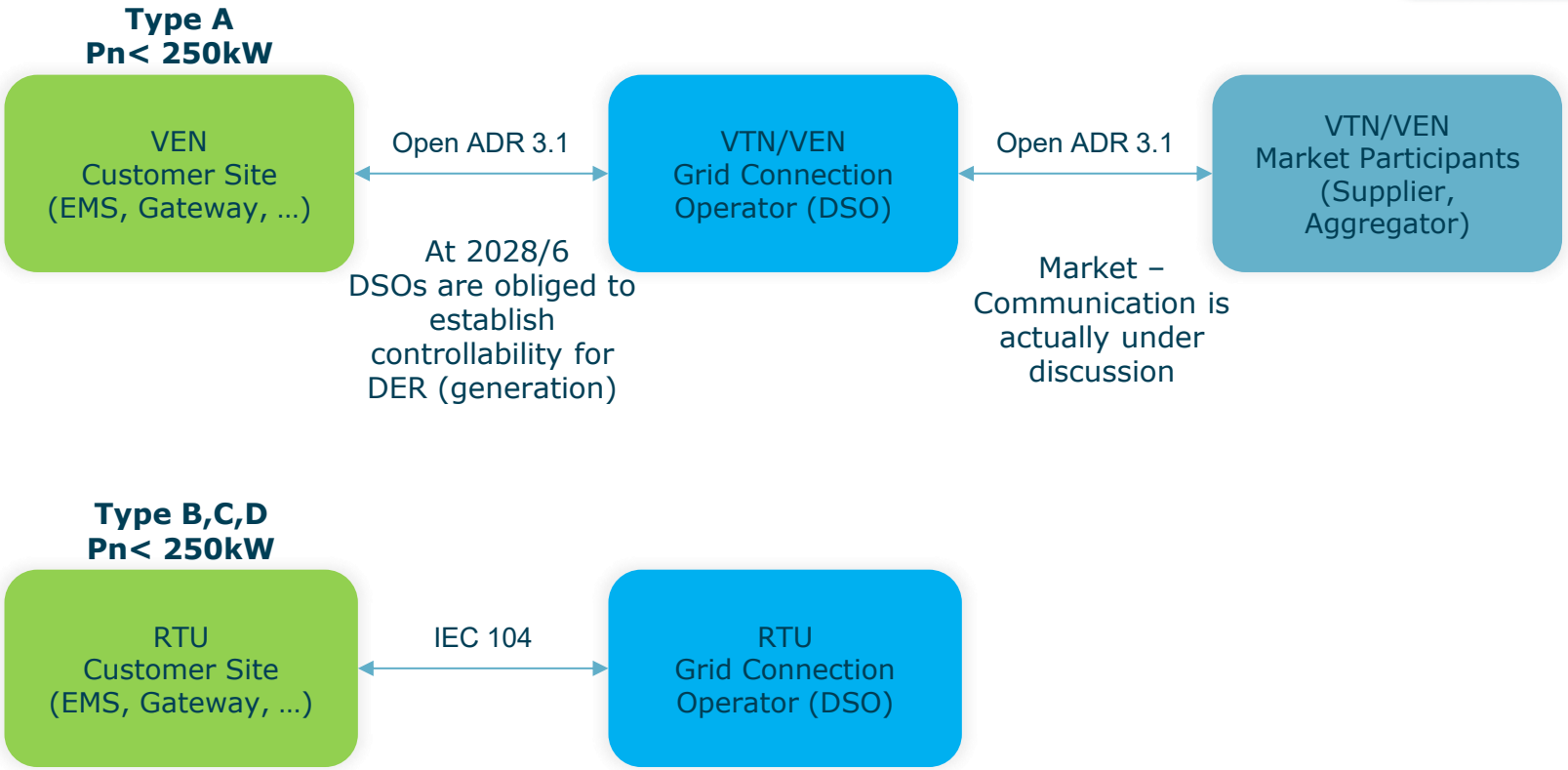
  ElWG § 103
  - (1) In the event of a **new grid connection** for a **feed-in** grid user or a change in the grid-connected power for a feed-in grid user, it **may be contractually stipulated** that the distribution grid operator shall **specify the maximum grid-connected power statically or dynamically** due to insufficient grid capacity. At the **request of operators of generation, consumption and energy storage facilities**, a **static or dynamic specification of the grid-connected power** may also be agreed upon in a permanent contract for these facilities.

- Technical Rules based on RfG, DCC

Objectives

- Dynamic export limits for DER (grid connection point)
- Flexible (Grid Connections (grid connection point)
- Dynamic Operation envelopes für customer installations
- Optional - communication between market and customer sites
- Measurements from customer installations

SW - Architecture



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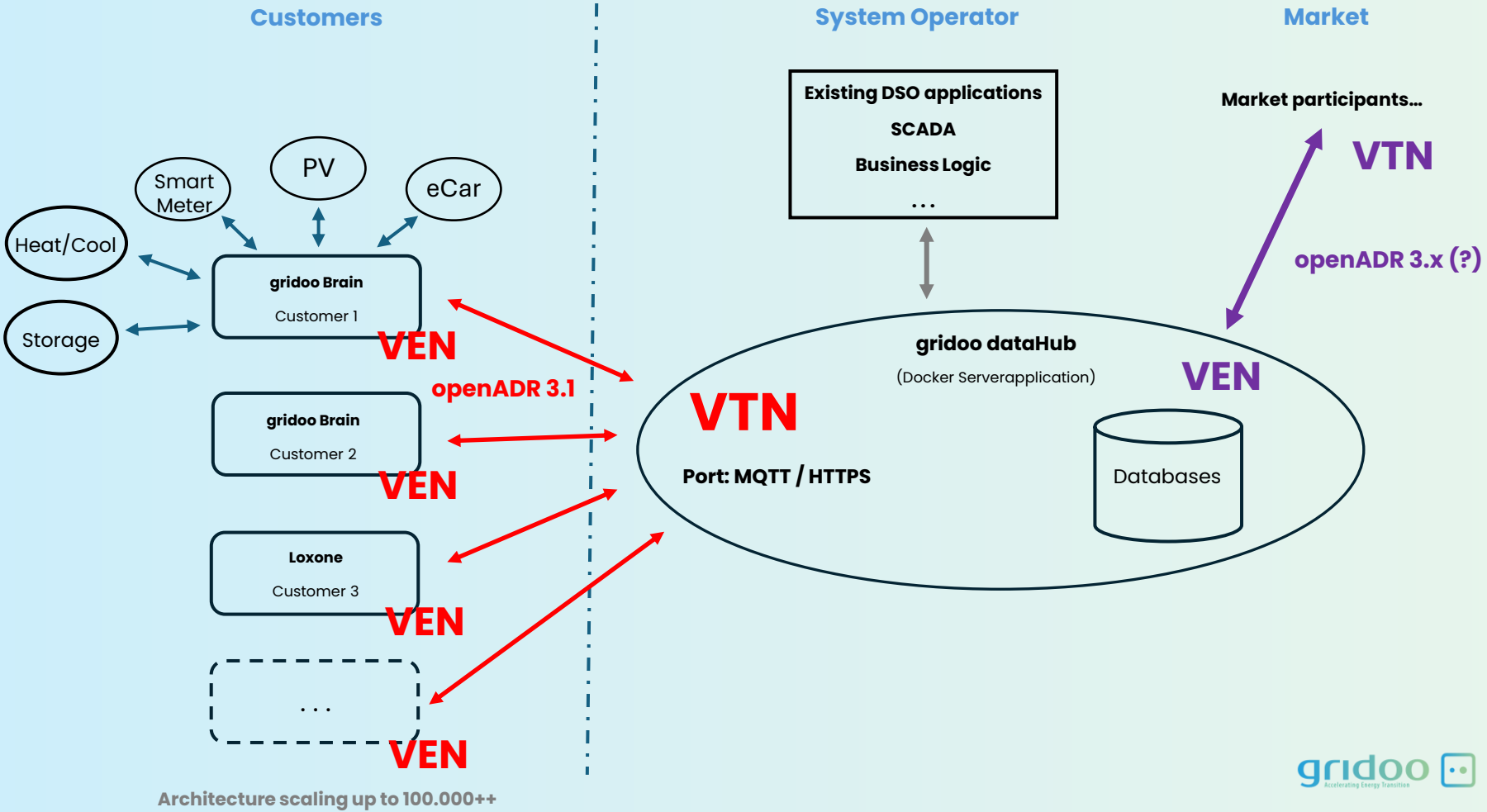
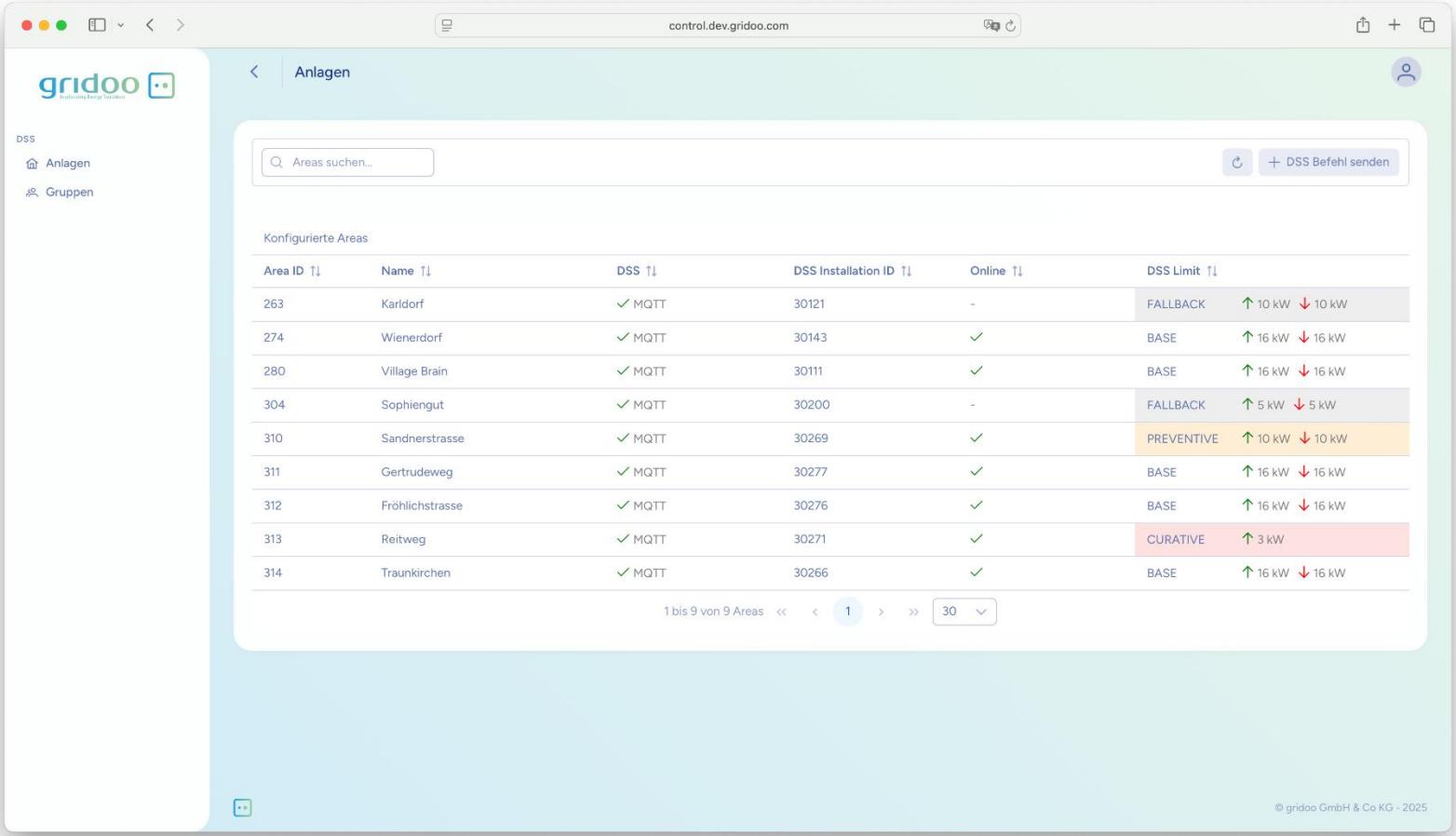
Accelerating Energy Transition

LOXONE


Customers
System Operator
Market
Existing DSO applications
SCADA
Business Logic
...
Market participants...
VTN
openADR 3.x (?)
PV
Smart Meter
eCar
Heat/Cool
Storage
gridoo Brain
Customer 1
VEN
openADR 3.1
gridoo Brain
Customer 2
VEN
Loxone
Customer 3
VEN
...
VEN
gridoo dataHub
(Docker Serverapplication)
VEN
VTN
Port: MQTT / HTTPS
Databases
Architecture scaling up to 100.000++
gridoo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DSS
Anlagen
Gruppen
Anlagen
Areas suchen...
DSS Befehl senden
Konfigurierte Areas
Area ID
Name
DSS
DSS Installation ID
Online
DSS Limit
263 Karldorf ✓ MQTT 30121 - FALLBACK ↑ 10 kW ↓ 10 kW
274 Wienerdorf ✓ MQTT 30143 ✓ BASE ↑ 16 kW ↓ 16 kW
280 Village Brain ✓ MQTT 30111 ✓ BASE ↑ 16 kW ↓ 16 kW
304 Sophiengut ✓ MQTT 30200 - FALLBACK ↑ 5 kW ↓ 5 kW
310 Sandnerstrasse ✓ MQTT 30269 ✓ PREVENTIVE ↑ 10 kW ↓ 10 kW
311 Gertrudeweg ✓ MQTT 30277 ✓ BASE ↑ 16 kW ↓ 16 kW
312 Fröhlichstrasse ✓ MQTT 30276 ✓ BASE ↑ 16 kW ↓ 16 kW
313 Reitweg ✓ MQTT 30271 ✓ CURATIVE ↑ 3 kW
314 Traunkirchen ✓ MQTT 30266 ✓ BASE ↑ 16 kW ↓ 16 kW
1 bis 9 von 9 Areas
1
30
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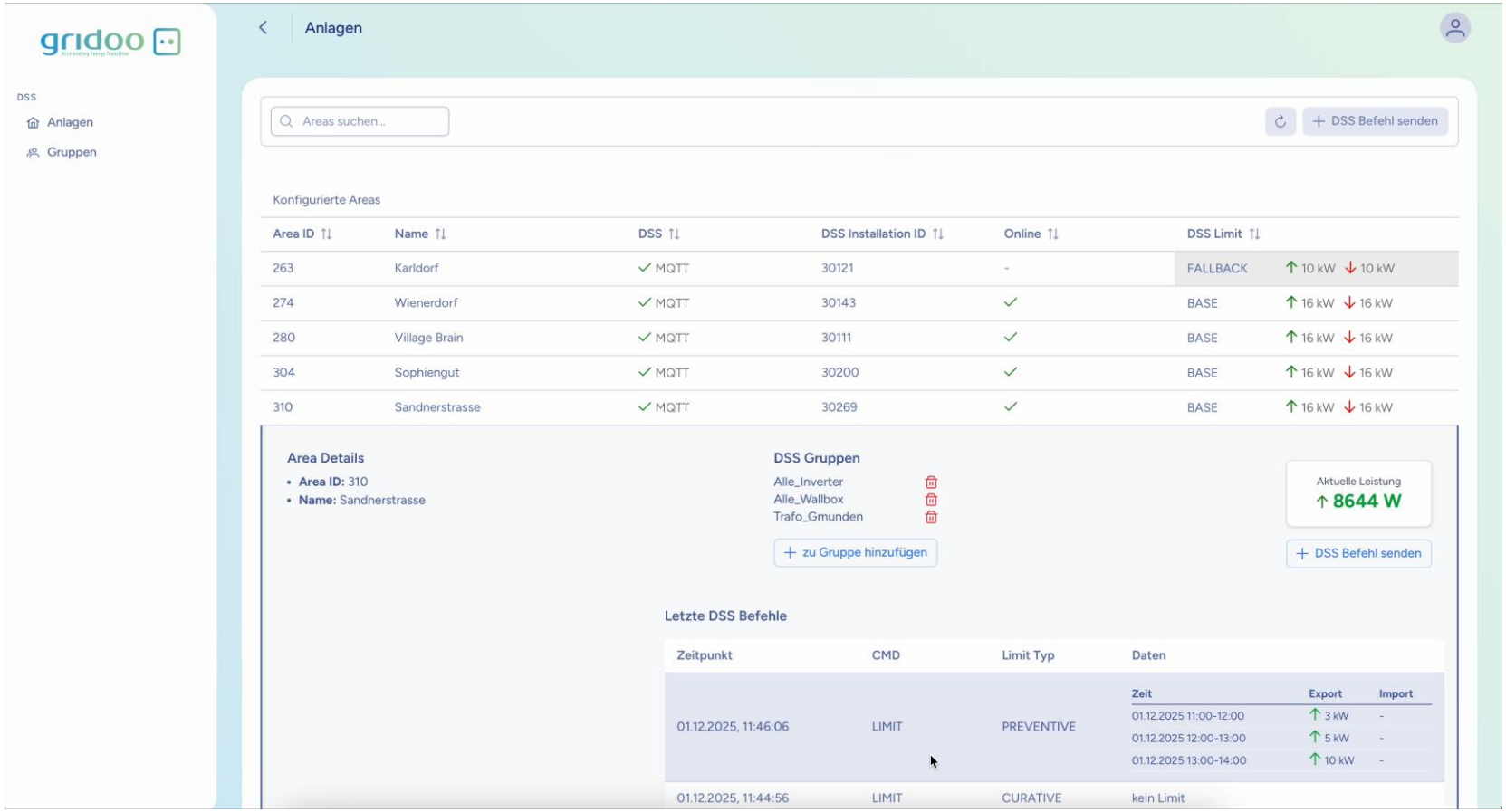
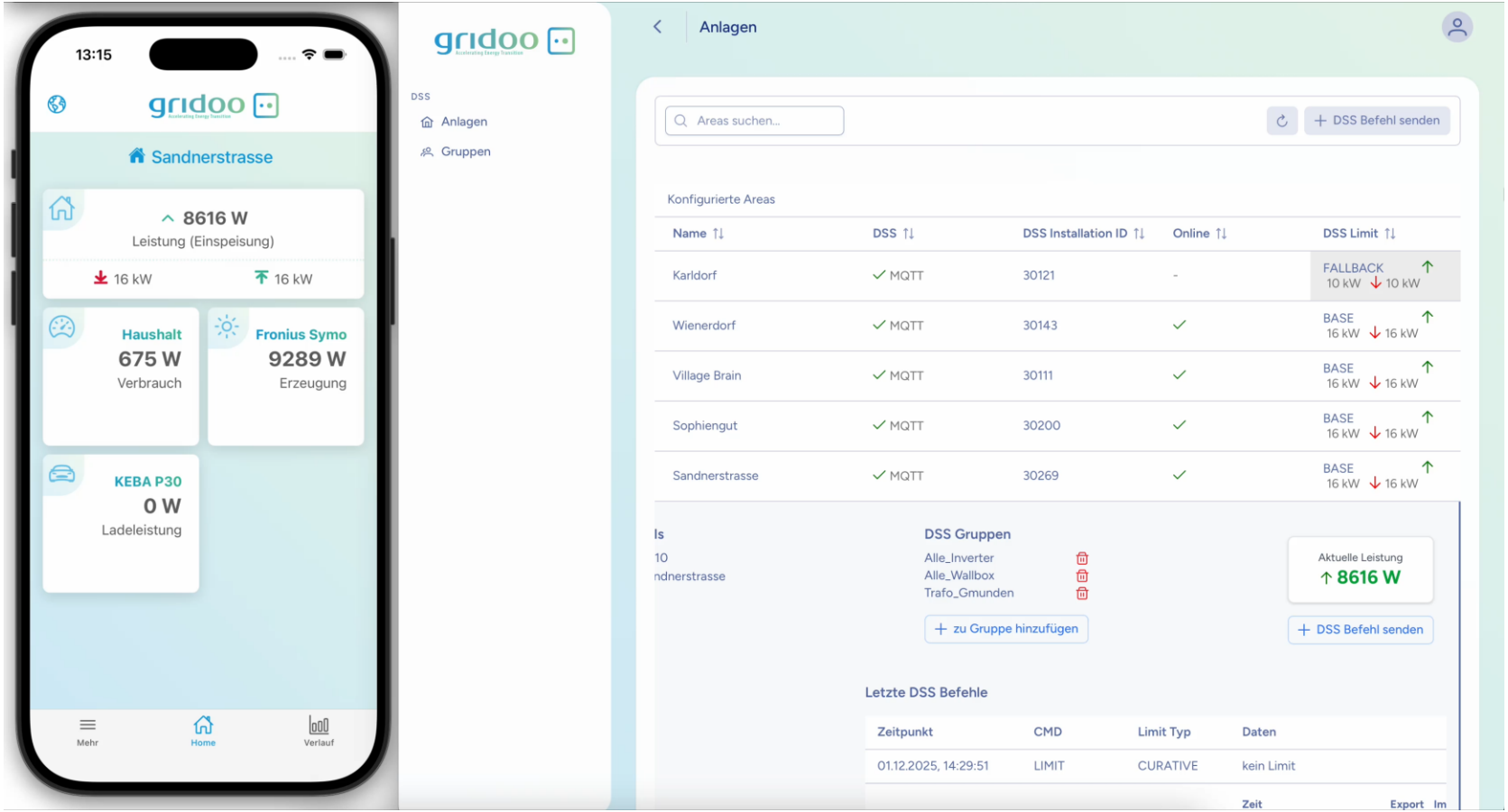
Overview



Video: curative



Video: preventive

Next Steps

- Standardizing OpenADR 3.1 for Austrian Use Cases
- Finishing of the architecture
- Market – Grid Operator – Customer Communication
- Regulatory requirements