PSIebus – The central basis for charging at the depot

- **State of charge**
  - Vehicle-ID
  - Mileage status
  - Expended energy
  - ...

- **Vehicle master data**
  - Manufacturer
  - Year of manufacture
  - Type of battery
  - ...

- **Block data**
  - Length of block
  - Energy demand
  - Vehicle type
  - Driver qualification
  - ...

- **Vehicle dispatching**
  - Communication with the buses
  - Parking position assignment/
    Selection of charging station

- **Network information**
  - grid
  - Energy market
  - ...

- **Charging plan**
  - Response

- **DMS**
  - Measurement (U,I,P,Q)
  - Transformation technique

- **Smat-Charging**
  - Communication with the buses
  - Parking position assignment/
    Selection of charging station

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Monitoring of the charging processes
Overview of a depot – example 1/2
Overview of a depot – example 2/2
Key Learnings

- A depot management system saves operating costs for all types of bus fleets already right now
- Software is independent from hardware suppliers
- An integrated depot- and charging management system helps to utilize your fleet best
- Integrating the grid supplier ensures future and modern grid management
Your benefits with PSIebus

- Planning, monitoring and optimization of all charging processes
- System already running successfully
- Control of charging based on the predicted energy demand
- Charging just as needed, net expedient charging
- Demand-oriented distribution of the available connected load
- Consideration of all operational requirements
- Integration into the network of the energy supplier
Succesfull Projects

RBL/ITCS
Train Management
Depot Management
PSIebus

PSIebus: The strength when combining Depot- und Charging Management
PSItraffic/DMS – Selected projects
Hamburger Hochbahn AG

- approx. 600,000 passengers per day (bus division)
- >1000 buses
- 110 bus lines
- 1,317 stops
- 927 km line network
- 6 depots

23.10.2020 PSIbus: The strength when combining Depot- und Charging Management