Data Model and Data Acquisition for PV registration schemes and grid connection – Best Practice and Recommendations

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Purpose of this Report

Review

- Collect existing requirements related to PV registration schemes and data models
- Key finding: Knowledge about installed PV systems varies a lot in quality and quantity

Use case

- Gather market data
- Administration of FIT, subsidies, guarantees of origin
- Administration of legal permits
- Grid planning and operation, power production forecast
- Project management support

Outcome

- Provide best practice examples from PVPS countries
- Develop recommendations regarding data acquisition and data modelling.

Recommendations: PV system Data

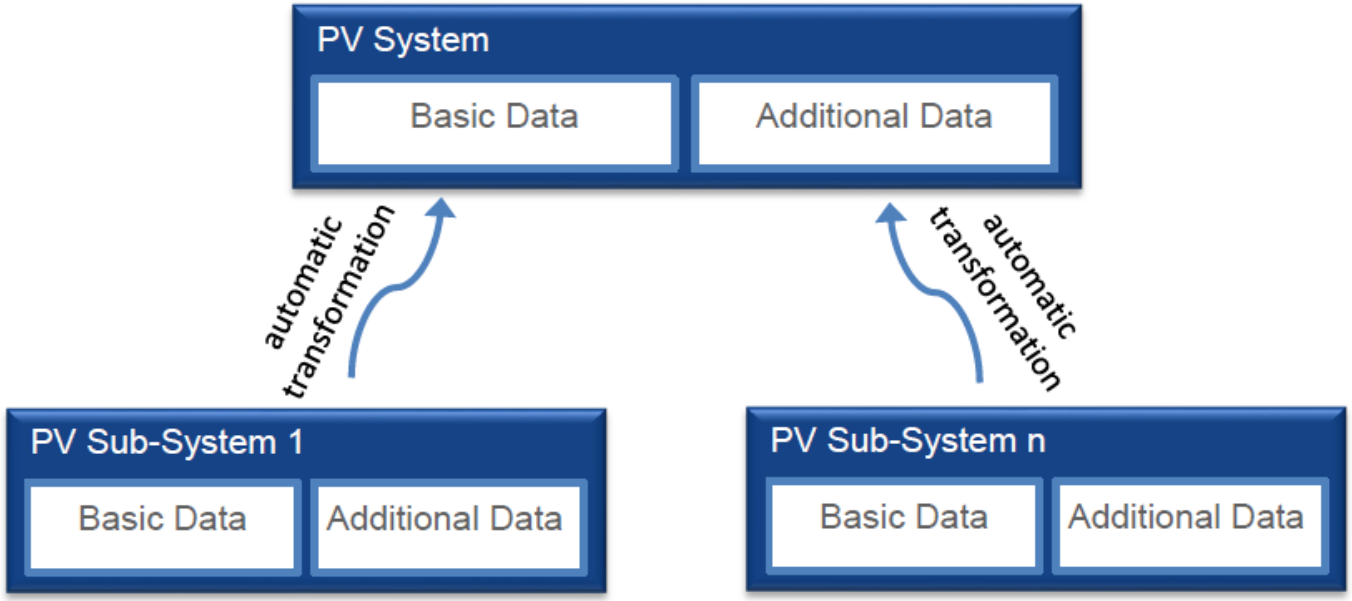
The following basic data of a PV system shall be collected

Basic data for database
Administrative data (identification number, name of the owner, contact details)
Location (address, coordinates)
Nominal AC power
Nominal DC power
Date of finalization of project* / commissioning* / system update / decommissioning

Additional data to be collected is named in the report.

Recommendations: Database Organisation

The database should have a flexible level of detail and therefore address the needs of multiple stakeholders.



Recommendations - Summary

- Countries should operate a database for Distributed Energy Resources (DER), in particular for PV power systems:
  - DER database shall be open for multiple stakeholders.
  - DER database shall cover all DER, not just a part of them, e.g. systems that are granted a FIT.
  - The use of the DER database shall be compulsory.
- Objective: A DER database shall reduce the overall administrative load for PV system planning, realisation, commissioning and operation. ➔ Therefore, the database shall substitute or support existing administrative processes.

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