

# Paris Session 2022



## The ways to promote open data in the power industry

D2\_PS1\_Q1.7 - What are the potential ways to solve the problem of open datasets for training and testing of the machine learning models in the power industry? What can stimulate industrial companies and scientists to share their datasets with public?

ALEXEY NEBERA



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CLASSIFICAÇÃO: PÚBLICA

# Problems of open datasets and their possible solutions in the power industry

## POWER INDUSTRY DATA

- power grid data
- load and generation profiles
- power equipment condition monitoring data
- current and voltage waveforms
- etc.

## PROBLEMS



Data privacy



Poor quality data

## POSSIBLE SOLUTIONS



Implementation of new business scenarios in regulatory documents



Creation of government open data platform

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# Possible benefits for industry and scientists to share their data

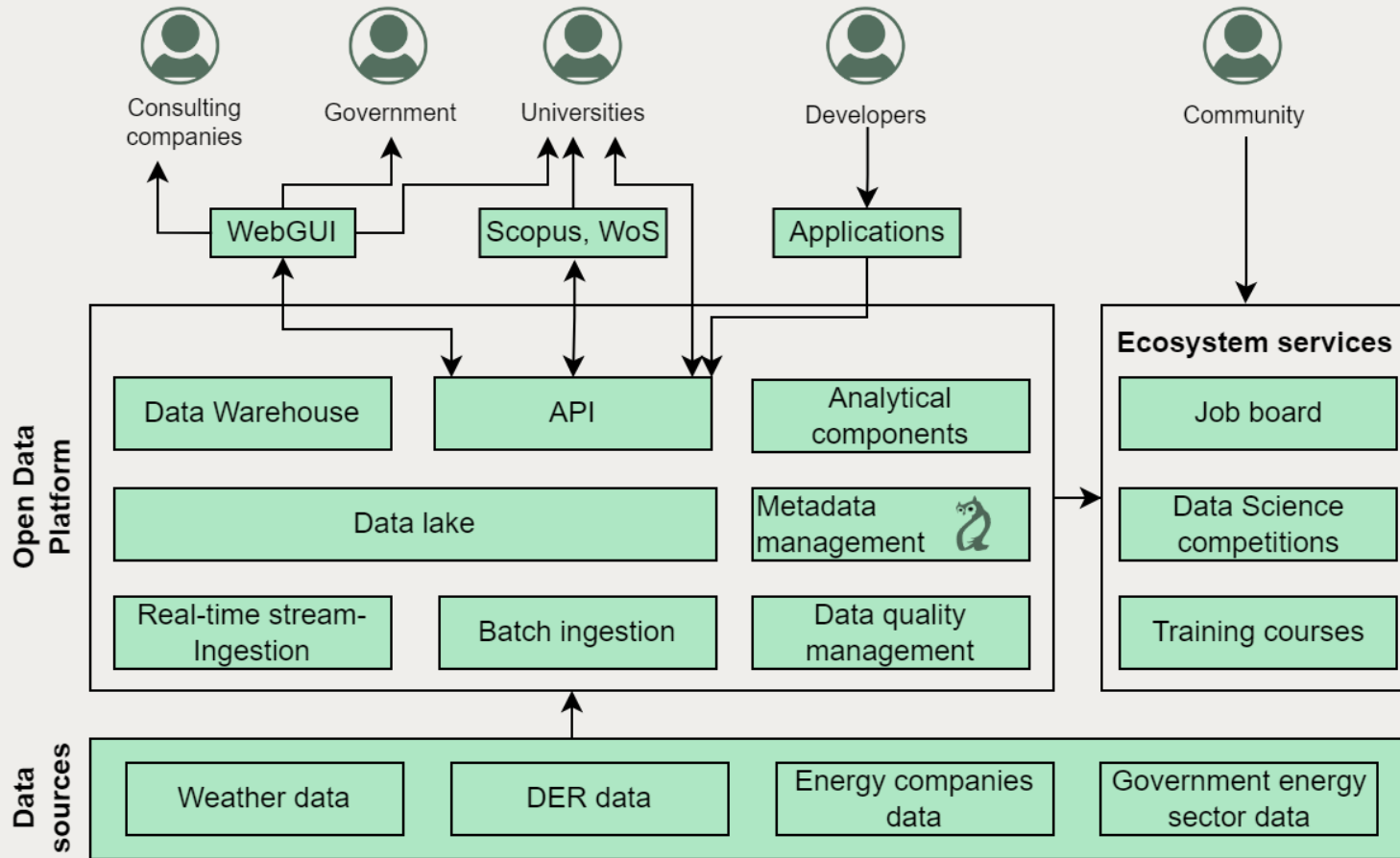
## Open data stakeholders

- Data suppliers (energy power companies, government)
- Aggregators (gather data in one organized and well protected space)
- Application and algorithm developers
- Enablers (data preparers)



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# Open data platform architecture for power industry



## Open data platform allows:

- to organize “Job board”
- to promote data science in power industry
- to organize data using ontology approach and to sell it as a service
- to speed up ML-driven innovations
- to manage emissions and climate risks in regard to power sector.

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THANK FOR YOUR ATTENTION!



**cigre**

For power system expertise