

Paris Session 2022



Opportunities and risks of applying ML in PS decision-taking

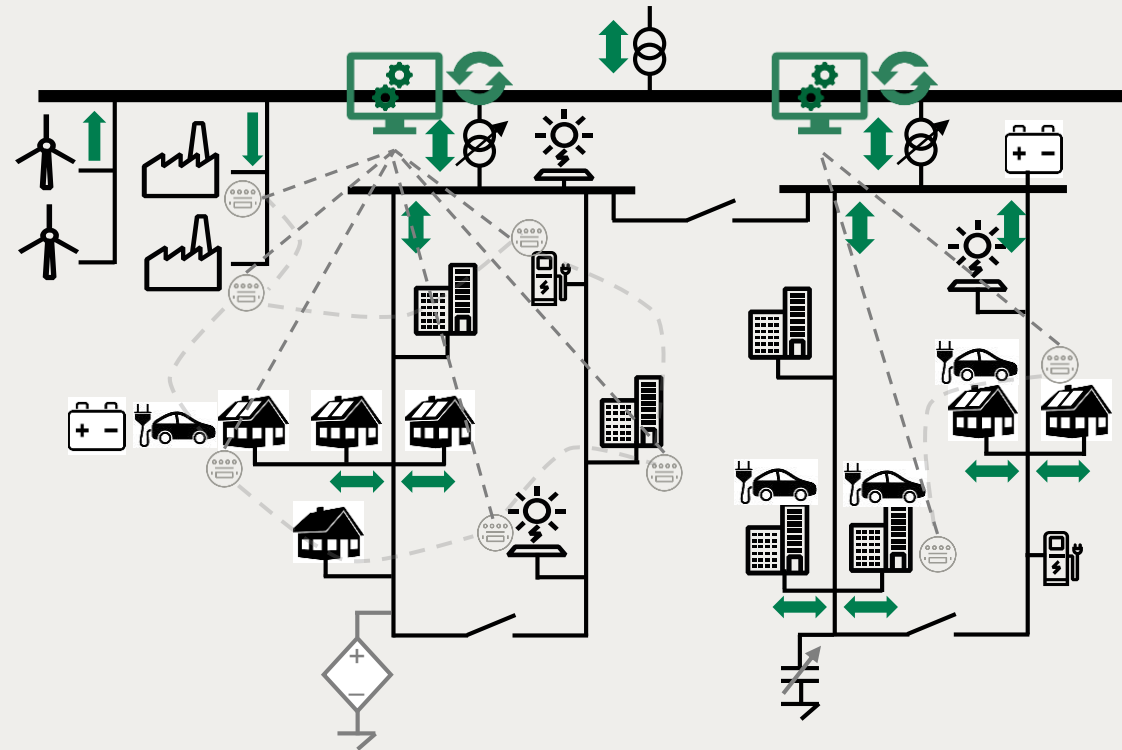
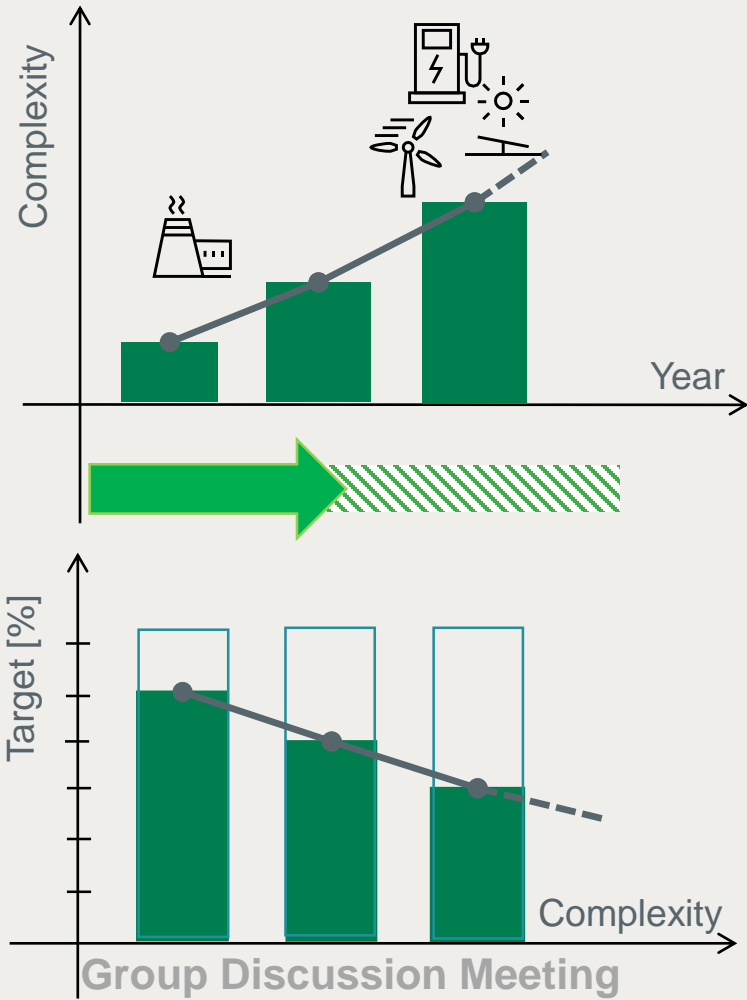
SC D2/ PS 1: Q2

Are there any restrictions on applying “black box” machine learning-based software for critical infrastructures like power industry? Is the application area of such software limited by decision-supporting systems or some decision-taking systems do exist?

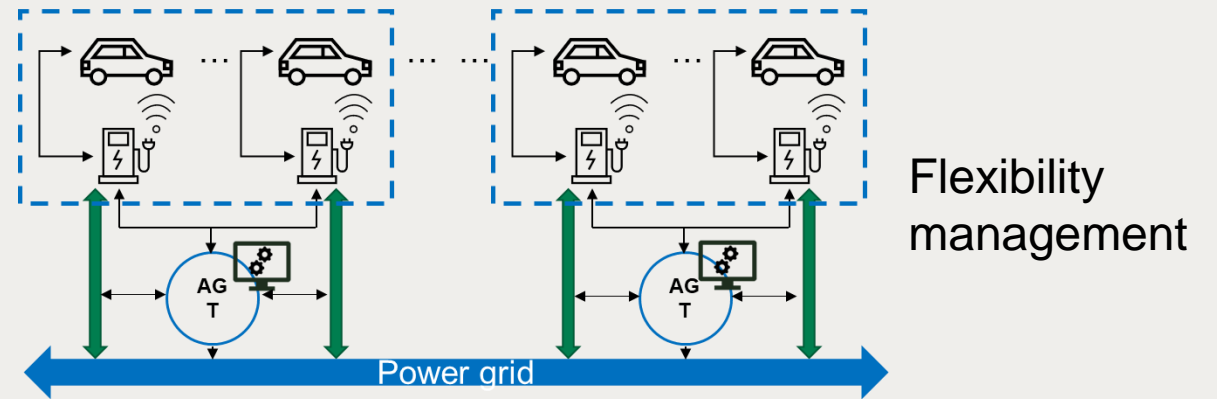
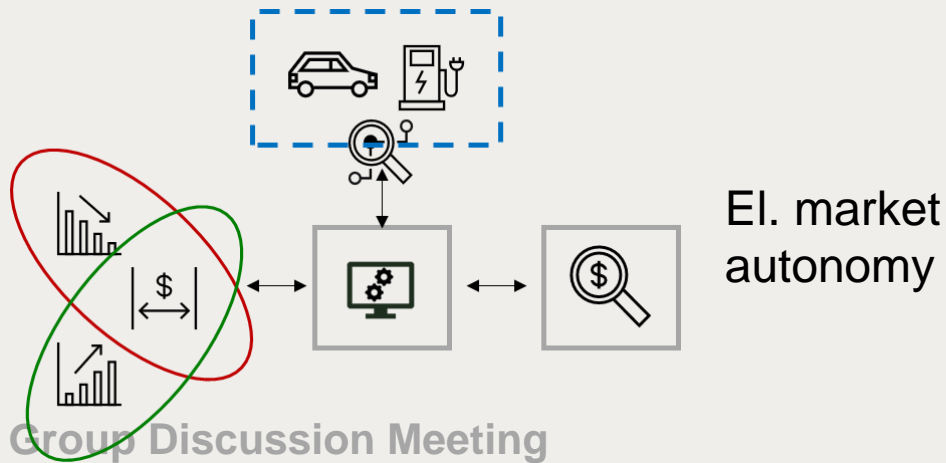
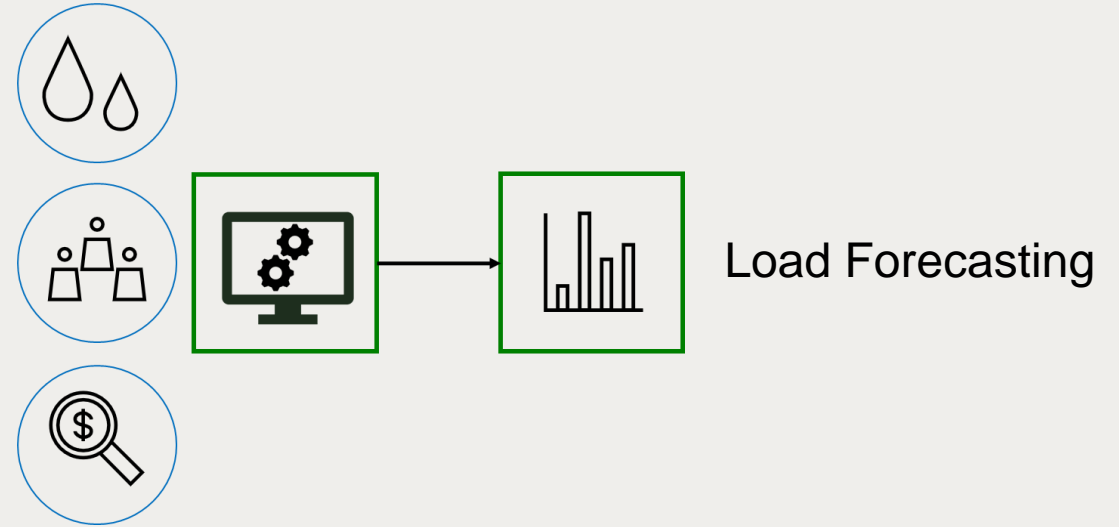
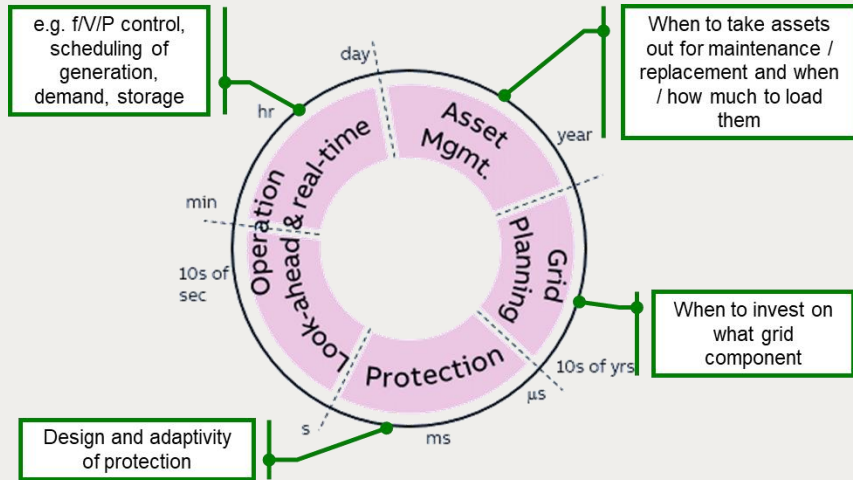
Milos Subasic, Germany

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Applications of AI/ML in decision-support and -making



Group Discussion Meeting

Risks and concerns of AI/ML implementation

Lack of transparency

Accountability

SOs are the users but often not the creators of the program

Black-box paradox

Human Autonomy

If AI/ML controls the flexibility assets, SOs are left with little maneuver space in controlling the flexibility

Overriding the program might be necessary in case of cyberattacks

Cybersecurity

AI programs require two-way communication – more vulnerability to non-authorized access or other types of disruption

If AI-based programs make autonomous decisions, faulty decisions resulting from cyberattacks can happen

EI. market functioning

AI system can be used by a variety of actors for different goals.

SOs cannot monitor what data the AI uses to make decisions about the electricity market

The programs can be used by a variety of actors for different goals