

Benefits of IoT solutions for switchgears

1. Optimized maintenance by predictive analytics and real-time diagnostics
2. Improved grid stabilization by controlled overload operation with digital twins
3. Plug & play with ready-to-use dashboards and global fleet view
4. Integration flexibility with APIs¹⁾ and Microservices
5. Cyber secure by design as fully separated from PACS²⁾
6. Supports mobile and agile working by remote asset monitoring & management
7. Higher service levels possible by remote support, updates and maintenance
8. Lever for data driven decision-making(“big data as an asset”) and intelligent assets

Measures necessary to increase acceptance

- Value of generated benefits needs to be better quantified and experienced by the user
- Awareness of cyber security standards and taken compliance measures for a secure IoT solution in substation environment
- Promote activities towards a “trusted cloud”¹⁾ for the energy sector to enhance adoption of cloud infrastructures and services
- Microservices provide a cloud-agnostic integration of OEM know-how into customer cloud
- Continuous education of maintenance and operation workforce on digital technologies like IoT, cloud and AI