

**The 13<sup>th</sup> International Workshop on Electric Power Control Centers  
Bled, Slovenia, May 17-20, 2015**

**The Smart Grid Architecture Model (SGAM) and its application for  
information system design**

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**Abstract**

The SGAM was intentionally developed to support the standardization work in the area of Smart Grid innovation, i.e. to harmonize the presentation of smart grid infrastructures and to identify gaps in the existing standardization framework.

For this purpose the SGAM provides a multi layer coordinate system that allows a clear position of smart grid infrastructure components within the coordinate system and the superposing of communication and data aspects, the deployment of functionality as well as business aspects, e.g. who are the involved stakeholder and where ends their responsibilities.

Thus the SGAM support for green field approaches the identification of the necessary business process and the involvement of the individual stakeholders. Based on this information the end-to-end business process is broken down into functional steps which can be assigned to the responsible stakeholders and finally the detailed functional implementation including information and communication models can be derived. For brown field implementation the SGAM can also be used to document the existing Status Quo as starting point for the implementation of new business processes.