



Security for smart Electricity GRIDs

Symposium on Innovative Smart Grid Cybersecurity Solutions

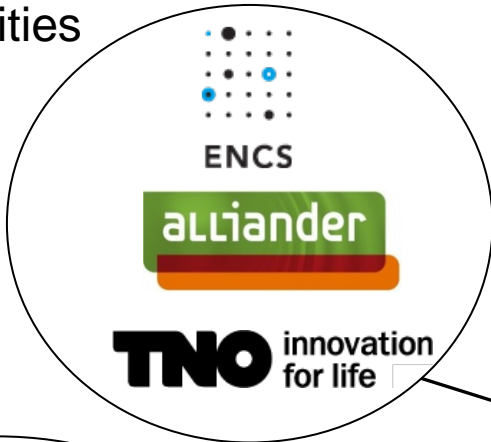
Reinder Wolthuis

Vienna, 13-14 March 2017

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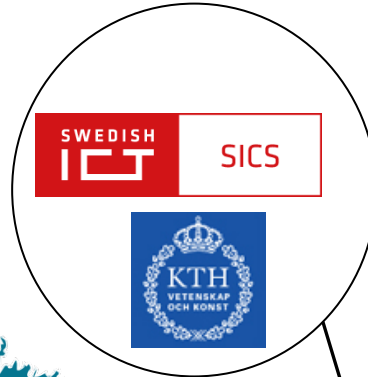
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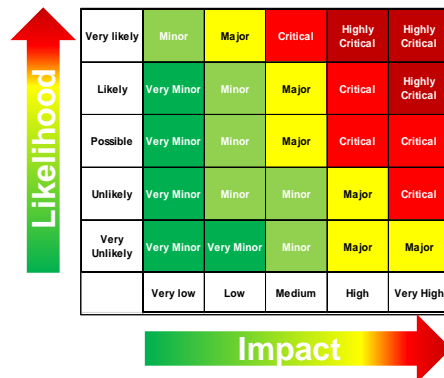


Main objective

“To enhance the protection of smart grids against cyber-attacks”

- We do this by
 - **Applying a risk management** approach to a number of smart grid use cases
 - **Enhancing risk assessment** methodologies

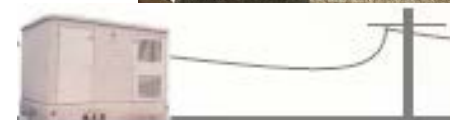
- Based on the results of the risk assessments we
 - Define **security requirements**
 - **Determine gaps** in current technologies, standards and regulations
 - Develop **novel security measures** for smart grid
 - **Test** the newly developed solutions



Very likely	Minor	Major	Critical	Highly Critical	Highly Critical
Likely	Very Minor	Minor	Major	Critical	Highly Critical
Possible	Very Minor	Minor	Major	Critical	Critical
Unlikely	Very Minor	Minor	Minor	Major	Critical
Very Unlikely	Very Minor	Very Minor	Minor	Major	Major
	Very low	Low	Medium	High	Very High



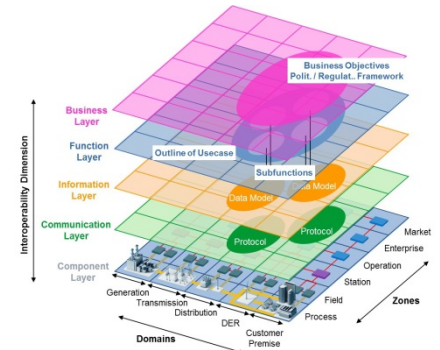
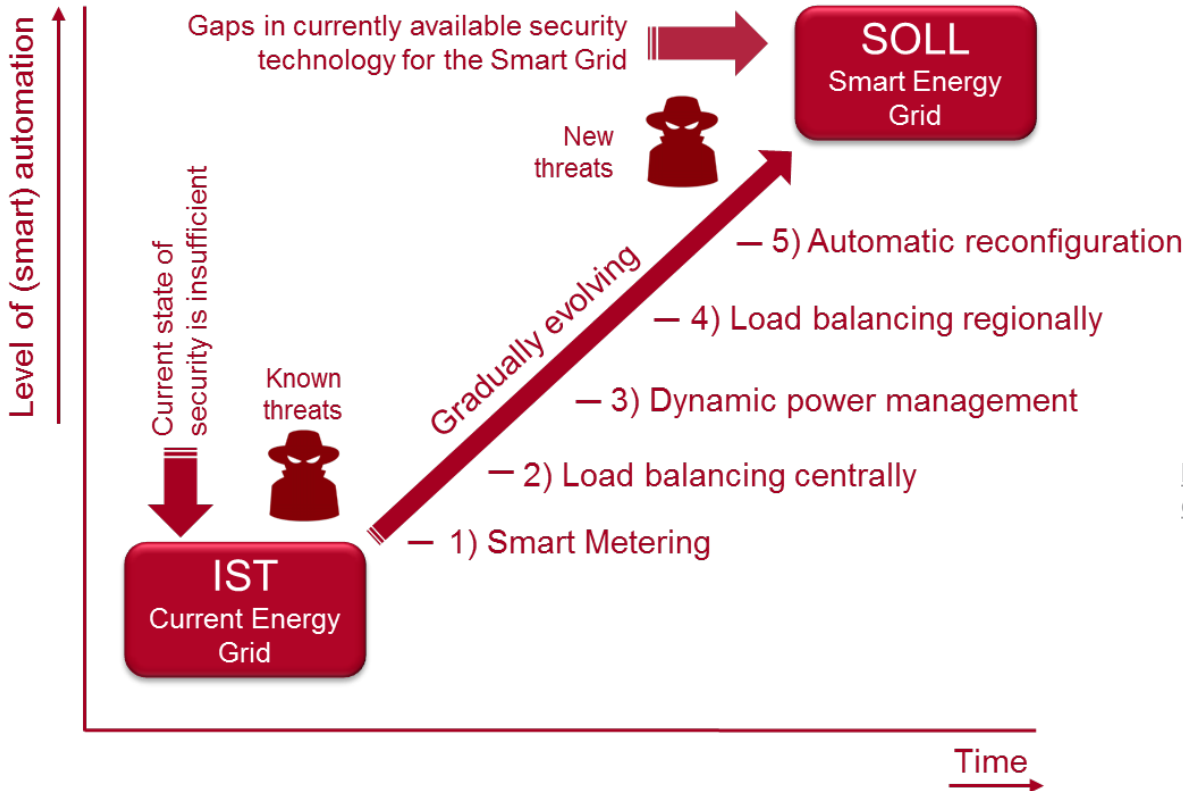
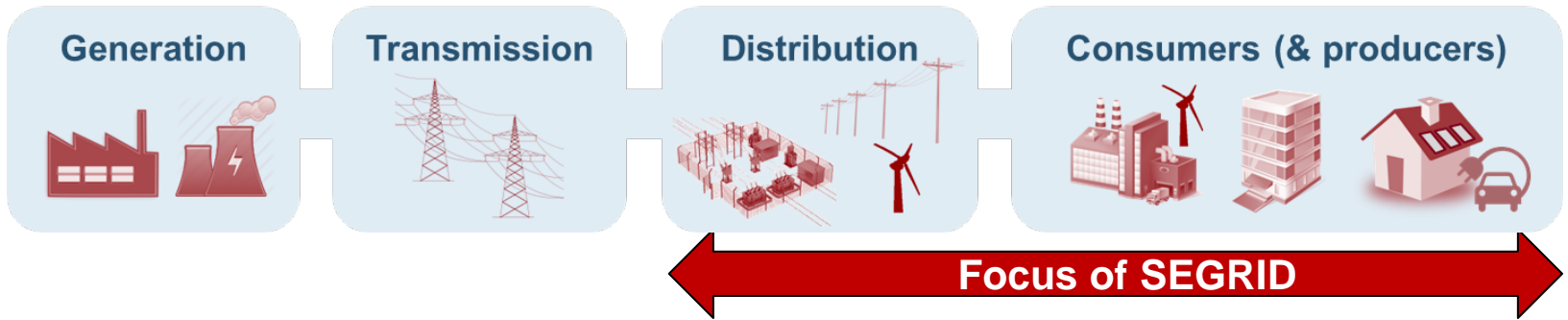
Smart metering privacy
Smart Grid communication security



SEGRID



Storyline



Functional architecture for UCs using SGAM

http://ec.europa.eu/energy/sites/ener/files/documents/xpert_group1_reference_architecture.pdf

Questions

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