



# WP4

## Operational Security

by Heidi Tuiskula

# Major Achievements



Outline for the **Smart Grid Security Centre** has been developed

1) Virtual centre with different physical locations:

- Simulation centre in Halden
- CPS labs UiO
- Smart Meter Testing @Mnemonics
- Smartgridsenteret @NTNU



We help the Utility Companies achieve their smart grid goals with higher resiliency and quicker response times against security threats.

2) Trusted platform for collaboration between industry, academia and public sector.

- Good collaboration with the relevant industry has been achieved
- 3 ind. PhDs on going to strengthen the collaboration between academia and industry

## Preparations and planning for the major launch of the SGSC

- 1) 14<sup>th</sup>-15<sup>th</sup> February 2017, Smart Energy Conference, Halden
  - IoTSec dissemination by presentation by Josef Noll
  - Introduction of SGSC through two visualised use cases.
  
- 2) Dissemination of the SGSC idea towards industry and public sector
  - Through NCE cluster in our meetings, workshops and other events
  - Through the international collaboration in H2020 projects

# Challenges and Future plans



There is no consistent definition for Smart Grid, and especially the boundary between smart grid and smart home is placed differently among different DSOs and service providers as well as among the academia. This creates an interesting challenge for the smart grid security centre.

SGSC has to be

- 1) Modular (smart meter - utility - smart home - business models)
- 2) Trusted environment
- 3) Engaging different stakeholder groups

# Confidential and security-critical material



Information available on the wiki

[http://cwi.unik.no/wiki/IoTSec:Secure\\_and\\_Confidential\\_information](http://cwi.unik.no/wiki/IoTSec:Secure_and_Confidential_information)



## Confidential and secure information

The steering board has decided on the [Steering board meeting 27Oct2016](#) to adapt the following guidelines and continues work on these topics.

### Confidential information

- Documents which are given to the project being confidential to the project shall be watermarked by *IoTSec confidential, shall not be distributed outside of the project without consent*"
- Deliverables being confidential shall be stored on the project server, e.g. owncloud.unik.no

### Security-critical information

Each project participant is asked to not publish security-critical information. If a participant regards information as potentially security-critical, he shall ask IoTSec's security officer for



# More organization matters



## Steering representatives:

- UiO: Olaf Owe
- UNIK: Stian Løvold
- NTNU: Nils Kalstad Svendsen, Sofie Nystrøm
- NR: Åsmund Skomedal
- Simula: Yan Zhang
- NCE Smart: Dieter Hirdes
- eSmart Systems: Davide Roverso
- Glitre Energi Nett: Otto Andreas Rustand
- Fredrikstad Energi Nett: Vidar Kistoffersen
- Movation: Bjarne Haugen

## Project leadership:

- Josef Noll
- Christian Johansen, COO
- Stian Løvold, Project owner

## Steering Board leader:

- Bjarne Haugen

## Security Officer:

- Otto Rustand

# Suggestions



- Majority of people accept ridiculous risks for added convenience
  - Digitalisation of the traditional industries is going to affect the boundaries of privacy
- > 1) Development of regulations, codes and standards is essential in close collaboration with academia and industry
- Today's and tomorrow's society is more and more driven by the needs and desires of individuals
- > 2) User-involvement: Incorporate citizens/end-users in projects, give them power to participate.
- Visualised goals are easier to achieve
- > 3) Early design: Use of fast prototyping and visualisation as a tool for reducing research cost and increasing the impact.