



Communication of Smart Meter Privacy project STOMP

SampEL project: Energilagring för integritet kring smarta elmätare – STOMP
Project leader: Daniel Månsson, KTH (PI) and Tobias Oechtering, KTH (co-PI)

Project STOMP is part of several research activities developing a privacy-by-design technology building on the European CHIST-ERA project COPES (Swedish part funded by VR) solving the smart meter privacy problem. In more detail, STOMP enhances the technology readiness level from 2/3 to 4/5 by taking real energy storages into account and aiming for first lab experiments. We currently plan the next step to test the technology in real environments, namely the KTH Live-in lab, who support our plans but additional funding and partners are sought. The **goal of the planned communication** activity is therefore twofold:

1. Communication of the ongoing and planned activities to the lead users, stakeholders, and decision makers to enhance the visibility and distribution of the research results and establish new collaborations for further development of the technology.
2. Increasing the awareness at the society, stakeholders, and decision makers of the smart meter privacy problem and the proposed solution approach developed in STOMP.

The goal should be reached with the following communication activities:

1. Stakeholder workshop
2. Online communication: Animated video
3. Flyer and poster

Stakeholder workshop

The workshop should bring together researchers, related industry representatives and stakeholders. It should be a one-day international workshop in the beginning of June 2018. In one plenary presentation we will describe the ongoing research activities around smart meter privacy. We will exploit the existing relationships e.g. from the COPES project (partners are ETH Zurich, Imperial College London, and INRIA) to enhance the reach mostly within Europe. Moreover, we will reach out to the KTH platform on energy and SRA StandUP for Energy. We will invite the relevant industry dealing with energy storages, energy management technology, smart meters, energy provider and provider of energy equipment (ABB, Vattenfall, Schneider, Kamstrup, SAP, Siemens, Echelon, Landis+Gyr, Toshiba, etc.) as well as European research institutes (RISE, Fraunhofer, AIT, TNO). Further we want to invite decision makers from data protection authorities (Sweden but also from other European countries such as Germany, Netherland, England, or France) as well as energy agencies (in particular Nordic energy agencies). Further, we will invite funding agencies and interest groups (on smart meter privacy and smart grids), e.g. SmartGrid+.

The funding should be used to cover the costs of the event. We would aim for no or a low registration fee from the targeted participants to ensure participation. We would target for approximately 70 participants, half of them researchers, the other half from industry, stakeholders, interest groups and authorities. The event should take place at an adequate

location, perhaps on KTH campus to lower the costs. It should include lunch and possibly a welcome dinner the day before (which costs could be requested in the registration). Further, we would like to cover the travel costs from 4 invited speakers from research, industry, decision maker in particular data protection authority and energy agency.

Online Communication: Animated video

To raise the awareness of the smart meter problem in the society, we want to produce an animation video.¹ The video should positively illustrate how energy storages, renewable energy sources, and smart energy control strategies can mitigate the privacy risk. Moreover, it should show that researchers at KTH supported by the Swedish energy agency develop the privacy-enhancing technology needed for the future. The video should be also provided to *gymnasieelver inom teknik och natur* as well as KTH undergraduate students to inspire the interest in electrical engineering.

Duration of the video will be 2-3 minutes produced by professional. The video should be produced by professionals and should be distributed on various channels such as social media (YouTube, Vimeo, Twitter, etc), but also on webpages of the school, project webpages, and researchers.

Flyer and poster

Lastly, once the experiments are pursued at KTH Live-in lab we want to create a flyer and a poster summarizing the activities. They will provide basic information about the problem and the project as well as contact information. The flyer should be distributed to visitors of the KTH Live-in lab and the posters put up on the walls.

Involved staff from KTH School of Electrical Engineering:

- Scientific: Tobias Oechtering, Daniel Månsson, Priyanka Shinde (STOMP funded PhD student)
- EES communicators: Louise Gustafsson, Gabriela Hernqvist

Estimated budget

A detailed budget will be provided.

- Workshop: 65-100kSEK -- Low estimate workshop without dinner on campus: 5.5kSEK rent lecture hall Q2 + 35kSEK lunch & snacks (70 x 500SEK) + 20kSEK four invited speaker travel and hotel costs + 4.5kSEK contingency
- Animated video: 200kSEK (costs heavily depend on desired implementation)
- Flyer: 5kSEK Design and print

Financial support for involved staff desired.

¹ Inspiring examples: <https://www.youtube.com/watch?v=JhHMJCUMq28>
<https://www.youtube.com/watch?v=kJEPr2Rt6JA>
<https://www.youtube.com/watch?v=BQyYVT8fNGQ>
<https://vimeo.com/205852104>
<https://vimeo.com/205258080>