



HyRiM

Hybrid Risk Management for Utility Networks

A Project Overview

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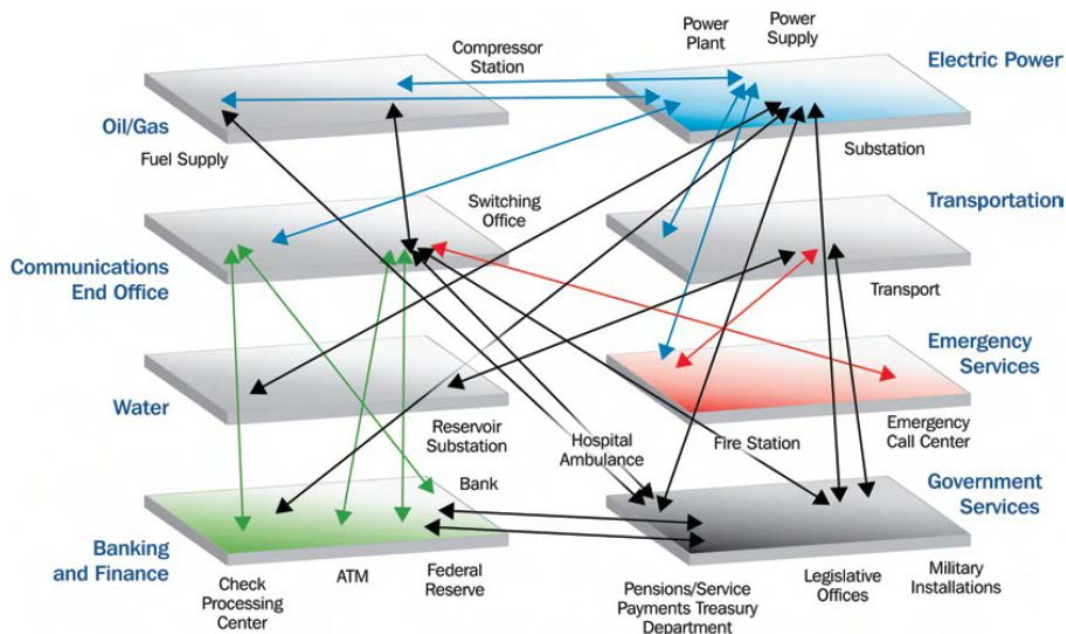
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Motivation

- Increasing interdependencies between various kinds of utility network infrastructures arise
 - Utilities and their control networks (SCADA systems) are interlinked with national and international partners
 - Introduces new potential threats and attack scenarios

- Attacks can have cascading effects within a utility provider (e.g. between the control and utility network) or on other utilities



Source: Department of Homeland Security, National Infrastructure Protection Plan

Project Idea



- HYRIM will focus on the interconnection points between control networks and individual utility networks
 - Providing a quantitative approach to support decision makers
 - Assessing the potential threats and their cascading effects
- In this connection Hybrid Risk Metrics refer to risk metrics spanning over control and utility networks
- Main objectives of the project:
 - develop and evaluate ‘Hybrid Risk Metrics’
 - assess and categorize security risks in interconnected utility infrastructure networks
 - provide foundations for novel protection and prevention mechanisms

Project Idea



- Focal points of the project:
 - Application of a mathematical framework to provide a basis for quantitative risk assessment
 - Consideration of the “human factor” by studying the sociological and economic effects on the different networks
 - Special focus on the usage on personally owned digital/communication devices and how it might comprise security of a control network
 - Combination of monitoring and surveillance of the extended perimeter to trigger “on demand” surveillance and introduce novel surveillance mechanisms
 - Demonstration and evaluation of the developed concepts in a real test bed environment and considering realistic infrastructure configurations



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Contact



- If you would like further information contact the HyRiM project members via the web page: www.hyrim.net
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- HyRiM is also on:

– **LinkedIn**

<https://www.linkedin.com/groups?gid=8246558>

– **XING**

<https://www.xing.com/communities/groups/hyrim-hybrid-risk-management-for-utility-providers-f6a8-1075112>