

# **Skadenyckeln ”The Damage key”- historical data drives knowledge forward**

*Leif Lagergren Nordengren,  
Swedenergy AB,  
Sweden*

## **Abstract**

The Damage key (Skadenyckeln) is a software which District heating Companies can report damage and leakage etc. for pipes and valves, through manually reporting or with a xml. extracted from NIS/GIS system. The data import is gathered in a database and can be extracted to a Excel from where we can analyze and create statistic and information about different damages, such as moist and leakage of water in to the insulation, injuries of pipes caused when excavation work next to pipes etc.

What can we gain with this information? We can improve our quality when manufacturing and building District heating system, we can improve our instructions, permission and communication when allowing excavation work next to pipes etc. With data from old District heating systems we can learn how to predict and prevent damages and damage mechanism such as corrosion and fatigue etc.

Our goal with this work and software is to increase the reporting of damages from more District heating Companies and import more data from each Company and thereby increasing the reliability of statistics and information. To succeed with our goal, we must get more NIS / GIS suppliers to implement and be able to extract a specified xml. file from their system. We must also offer our district heating company, service with reliable statistics, information and knowledge.