



Best praxis project for smart city

Comprehensive heat meters data remote reading in the city district heating (DH) system



www.stepupsmartcities.eu



Co-funded by the European Union



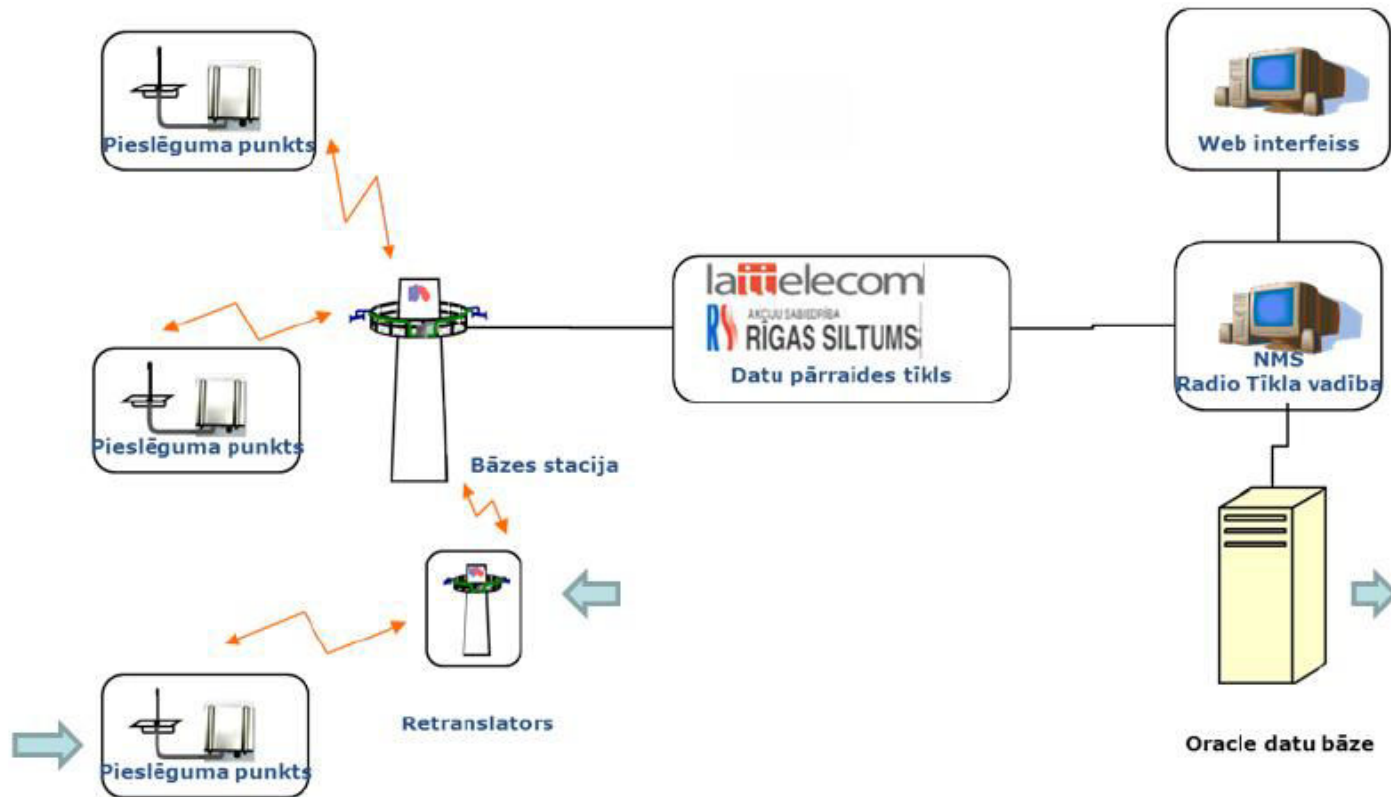


Comprehensive heat meters data remote reading in the city district heating (DH) system

Every building - which is connected to the city DH system - is equipped with the up – to – date building heat substation (BHS) with indirect consumer connection mode to grid. Heat meter readings were performed in separate time in manual mode before the current system update, sometimes in different days and therefore was necessity to involve certain amount of employees to read data of more than 8.000 BHS, reports preparation and transmission.

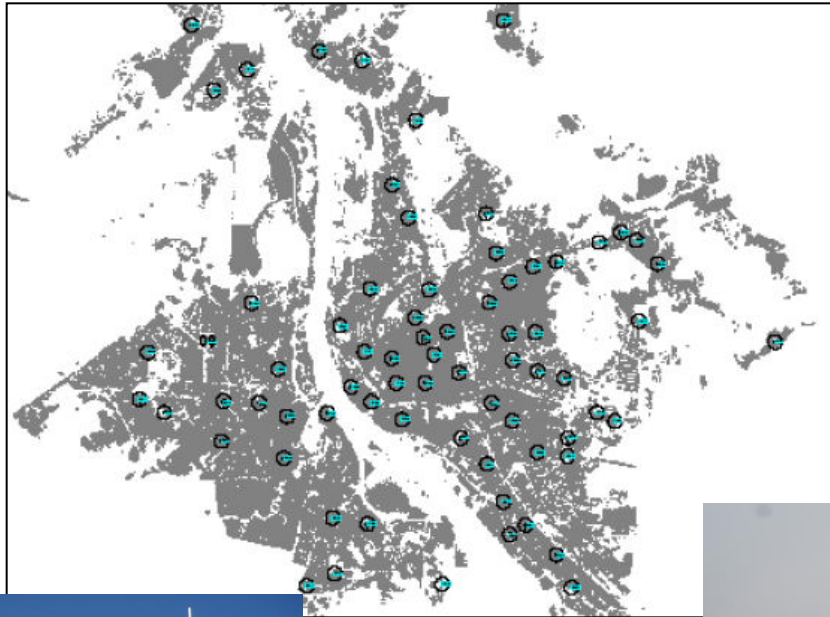
Best praxis example project includes upgraded heat meters in building heat substations and their data remote reading by dispatch board and thereby performs innovative method of consumed energy - almost simultaneous data collection which takes not more than three hours from 8.000 substations. Advantages are: relieving staff from this monthly extra duty, improvement of consumption - billing data accuracy, allows current issues to resolve fast

Comprehensive heat meters data remote reading in the city district heating (DH) system



System layout

Comprehensive heat meters data remote reading in the city district heating (DH) system



Network settlement of 86 base stations
& retransmission boards in the city





Integrated approach

Project includes smart upgraded heat meters in building heat substations for their data remote reading by up-to-date wireless data transmission systems.

Measure introduction is performed by the utility – after coordination with the building managers – and in close cooperation with professionally skilled company.



Investment size and sources

Measure introduction is financed by the utility with possible attracting co-financing state or structural resources. The utility own capital and loan were investment sources for the current project.

Cost of the current project introduction was – 1,72 million Ls/ 2,45million EUR without VAT.



Results

- After the measure introduction utility might receive on regularly bases data of heat meters operation and heat loss. Potential heat supply might be fast identified and resolved, thereby reducing loss and improving service quality.
- Less time consuming billing routines.
- Less data imperfections in billing caused by manual data reading and recording.
- Wider service opportunities of clients.
- Optimized performance of staff employment.



Measure enforcement issues and risks

Measure introduction engaged the data transmission resources for the only one type of energy (heat energy) data collection. Might be rationally to use this data transmission system also for remote metering and data transmission of other consumable types – gas, water, electricity – which would lower system introduction costs.



www.stepupsmartcities.eu



Co-funded by the
European Union



More information

For communication:

JSC “Rīgas siltums”

<http://www.rs.lv>

Birute.Kruze@rs.lv

Phone +371 6701 7365