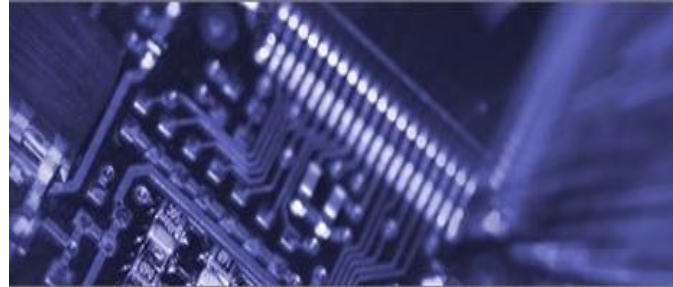


Meter reading forms the backbone of home utility billing systems. Incorrect meter readings cause a chain of events that increase costs and create customer dissatisfaction. In fact, measurement faults are one of the main causes for the mismatch in supply and consumption of water and gas in the EU.



The aim of the **SyncSen** project is to provide utility companies with a secure remote meter reading solution to increase company competitiveness and customer satisfaction. It addresses the special needs of home utilities, providing a remote metering solution independent of the electricity infrastructure.

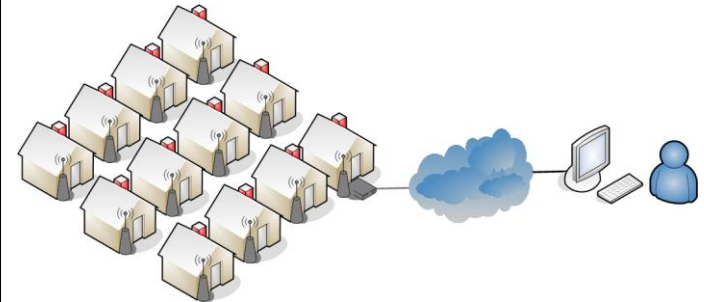
To address this need, the **SyncSen** automated meter reading (AMR) technology provides a cost-effective and ultra-low power consumption solution by using a wireless technology and a novel hardware and software approach.



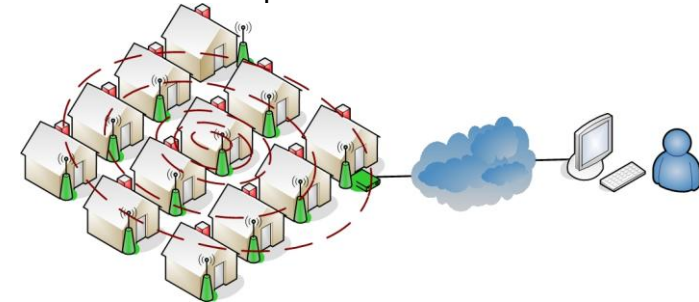
### Main Features:

- Tailored for low cost metering applications.
- For urban and rural scenarios as well as all type of buildings.
- For new and retrofitting market.
- Multi-hop topology compliant with the EN-13757 standard.
- Ultra Low power consumption (Battery life > 10 years).
- Novel synchronized wake-up mechanism.
- Ease of installation, with very low maintenance cost.
- Secure bidirectional communication for remote and additional utility services.

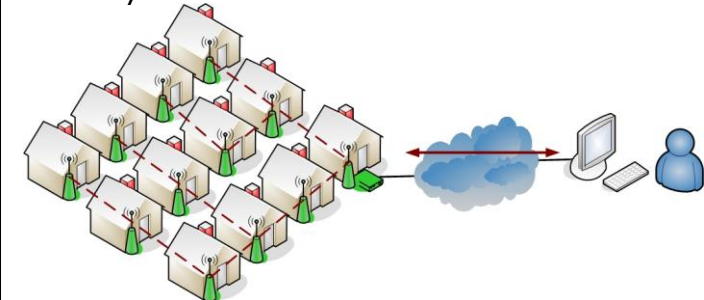
### Operating principle: Synchronised wakeup



**1.** The network remains inactive between data collection processes.



**2.** All the meter nodes in the network wake-up simultaneously. A novel mechanism is implemented to maintain the synchronization.



**3.** A multi-hop network is formed, and consumption data is collected from all meter nodes.

For further information and product availability, please contact:

e-mail: [pancras.villalonga@cric.cat](mailto:pancras.villalonga@cric.cat)

web: <http://syncsen.cric-projects.com>

## Companies

### - **Tritech Technology AB**

PO Box 1094, SE-172 22 Sundbyberg, Sweden

Tel: +46 (0)8 410 120 00

e-mail: Gosia.Loow@tritech.se

### - **Soft & Control Technology s.r.o.**

Magnezitárska 10. Košice 040 13, Slovakia

Tel: +421 55 7961 411

e-mail: project@sct.sk

### - **CASON Engineering Plc.**

Velencei út 37, H-2030 Érd, Hungary

Tel: +36 23 522 100

e-mail: tamas.boday@cason.hu

### - **JCB Electromecánica S.L.**

C/ Vic 20, 08006, Barcelona, Spain

Tel: +34 93 204 99 22

e-mail: jcb@filnux.com

### - **OSSIDIAN Technologies Limited**

Media Cube, IADT Campus, Kill Avenue, Dun Laoghaire

Co Dublin, Ireland

Tel: +353 1 278 7111

e-mail: donald.hickey@ossidian.com

### - **Lowri Beck Systems Ltd.**

Westward House, King Street West, Wigan, WN1 1LP, UK

Tel: 01942 496575

e-mail: syncsen@lowribeck.co.uk

### - **Water Services Corp.**

Qormi Road, Luqa, Malta

Tel: 00356 2244 5566

e-mail: stephen.galeastjohn@wsc.com.mt

## Research Centers

### - **Centre de Recerca I Investigació de Catalunya (CRIC)**

Travessera de Gràcia, 108. 08012 Barcelona, Spain

Tel: +34 93 204 99 22

e-mail: pancras.villalonga@cric.cat

### - **Malta Innovation for Industrial SMEs**

UB5B, San Ġwann Industrial Estate, Malta

Tel: 356 21 482 144

e-mail: mbonello@miis.com.mt

### - **Universitat Pompeu Fabra**

C/ Tànger, 122-140

08018 Barcelona, Spain Tel: +34 93 542 14 98

e-mail: nets.dtic@upf.edu



## SYNCSEN

Ultra-low power wireless sensor network for metering applications

Project Number:

FP7-SME-1-2007-222322

