

# Gold medal to SICS for European research project



The SICS-led European ESNA project has received the ITEA Achievement Award gold medal at the ITEA co-summit in Ghent, Belgium. The award is given annually by the ITEA organization to "highly successful projects with outstanding contributions". Among the project partners are ABB, Acciona and CRL Sweden.

The ESNA (Sensor Network Architecture) project ran from 2006-2009 with the purpose of developing a technical foundation for wireless sensor networks and the Internet of Things. One of the major results was SICS' open source Contiki operating system, today one of the leading operating systems for wireless sensor networks and the Internet of Things.

The ESNA project explored sensor networks in industrial contexts including energy monitoring and management, industrial process control, and precision agriculture. The technology is now included in commercial products from many project partners, including ABB and CRL Sweden.

"The ITEA Board recognises the important role that ESNA is playing in the Internet of things with business-oriented wireless-sensor network applications using a standard architecture and proof-of-concept implementations," said Philippe Letellier, Vice-Chairman of the ITEA 2 Board. "ESNA offers an impressive balance between advanced technological innovation - including the world's smallest implementation of IPV6 and optimisation of radio communications between devices to reduce energy use - and a business-oriented approach to defining applications."

"The technology developed and the knowledge gained in the ESNA project are now an important part of our mesh technology product line," said Björn Karlsson, Vice President Business Development of CRL Sweden. "Participating in the project gave us access to research results that we could immediately apply to our commercial offering."

"The ESNA project funded a critical part of the development of the Contiki operating system," said Adam Dunkels, principal author and project leader of the Contiki project. "ESNA gave us the opportunity to put our system into good use in industrial applications and for us to learn from the specific challenges in commercial deployments."

"A unique characteristic of the ESNA project is the strong emphasis on innovation for challenging application domains", said Olle Olsson, project leader of the ESNA project. "Such application work has not only resulted in successful commercial exploitation, but has also uncovered critical requirements that underlying software platforms have to fulfil".

## The ITEA Achievement Award

Each year, the ITEA Achievement Award highlights three highly successful projects with outstanding contributions to the ITEA programme. Major factors include innovation, exploitation

and dissemination. The project gets either the bronze, silver or the gold medal.

This year, the award winners were announced at the 2010 ITEA symposium, held in Ghent, Belgium on October 26-27, 2010.

### **The ESNA project**

ESNA - started in 2006 and finished at end of 2009 - was a collaborative research project with 20 partners from six European countries: Sweden, Finland, Belgium, Spain, Slovenia, and Croatia. The partners were universities, research institutes, large and small industry. SICS led the project.

The following Swedish companies participated: ABB Corporate Research, Communication Research Labs Sweden (CRL), Vibrel, Lansen Technology, Electronic Guard Center (EGC), and Vendolocus Development. The Swedish part of the project was funded by VINNOVA and the participating Swedish industrial partners.

In total, all the ESNA partners provided 70 person-years of effort to the project.

ESNA Project leader: Olle Olsson (in photo), SICS, +46 8 633 15 19, [olleo@sics.se](mailto:olleo@sics.se)  
Contiki chief architect: Adam Dunkels, SICS, +46 8 633 16 14, [adam@sics.se](mailto:adam@sics.se)

ESNA: <http://www.sics.se/esna>

Contiki: <http://www.sics.se/contiki>

ITEA 2: <http://www.itea2.org>

Eureka: <http://www.eurekanetwork.org/>

*ITEA (Information Technology for European Advancement) is a pan-European research programme within the Eureka Framework, where projects perform advanced R&D on software technology and applications. The project portfolio contains more than 100 projects, with more than 1000 partners from 30 countries, and the ambition is that by 2013 more 30,000 person-years will have been invested in advanced R&D projects.*

Photo by Lars Nyman.

2010-10-29