

WSAN M&C

02 December 2011



Wireless Sensor & Actuator Network for indoor environmental Monitoring and Controlling

Applicant: **Onleco S.r.l.**

Project duration: **24 Months**

Project partners:

- **Giacomini S.p.A.**
- **Capetti Elettronica S.r.l.**
- **C-Labs S.r.l.**
- **Politecnico di Torino - DENER**

In the context of the building's energy savings, we are seeing the spread of the contracts of "energy service" that have as their central element of the reduction in consumption.

To avoid that would compromise the comfort of the occupants, this type of contract requires observance of contractually fixed indoor environmental conditions. In most cases, however, the testing of indoor temperatures occurs only at the user's context with measurement that are unable to provide a comprehensive service quality because it pertains to a period is too limited.

Another key aspect behind the project is the necessity to have control systems that act on diffusely individual terminals to provide a high performance of indoor thermal quality.

To complete the framework of considerations that underlie the project emerges, in terms of fuel consumption for air conditioning, the relevance of existing buildings and therefore the need for control systems which use wireless technology to reduce costs and difficulties in implementation are often introduced by wiring.

The project WSAN-M & C is therefore proposed to develop an integrated environmental monitoring and regulation of air conditioning systems that combines the power of flexibility and precision of the wireless monitoring system with the potential for extensive adjustment of the individual carried on board terminals.