ARTEMIS Call 2010 Project 2693894

WSN DPCM



Wireless Sensor Network Development, Planning, Commissioning and Maintenance

PROJECT *description*

WSN-DPCM will develop a full platform addressing the main Wireless Sensor Network challenges as well as delivering middleware and a toolset for Development, Planning, Commissioning, and Maintenance of WSN designs in smart environments.

RELEVANCE to call

WSN-DPCM contributes to the implementation and deployment of applications for smart homes and for private and public area monitoring as defined in **APS3: Smart Environments.** WSN-DPCM also contributes to several ARTEMIS industrial priorities:

> Design methods and tools (DMT)



- > Seamless connectivity and middleware (SCM)
- > Reference designs and architectures (RDA)

MARKET innovation

The toolset leveraging on the middleware will provide the needed value to allow the WSN application developers to focus their efforts up from hardware, platforms, tools, and implementation on high added-value aspects such as the creative use of the WSNs for effectively solving customer problems and application quality.

The platform will reduce the cost of WSN system design by lowering the entry barriers and hold-up problem in the field, the skill requirements for the developers and the level of detail for the projects. The openness of part of the platform will also lower the cost of hardware migration of WSN applications.

TECHNICAL *innovation*

WSN-DPCM will offer an end-to-end integrated tool-chain solution to promote a model-driven architecture in all design and operational views of a WSN system:

- > Development view promotes reusability of software components and guarantees the functional and behavioral portability.
- > Planning view accelerates network deployment and reduces the number of nodes, thus decreasing cost.
- > Commissioning and Maintenance view helps put the smart environment into operation and assists users operating and maintaining it.

The toolset extends beyond the Graphical User Interface level, seamlessly integrating the information flow between the tools. The middleware will act as the backbone of the software infrastructure of the integrated environment.



PROJECT COO	RDINATOR	START	
Luis Redond	o / Daniel Rodríguez	Octobe	r 2011
 INSTITUTION		DURATIO	N
 MTP		42 mon	ths
EMAIL		TOTAL IN	IVESTMENT
lredondo@rr	ntp.es	€3.3 M	
daniel.rodrig	uez@mtp.es	PARTICIP	ATING ORGANISATIONS
		8	
WEBSITE		NUMBER	OF COUNTRIES



Advanced Research & Technology for EMbedded Intelligence and Systems