



DEWI

Dependable Embedded Wireless Infrastructure

PROJECT description

DEWI will provide key solutions for wireless seamless connectivity and interoperability in the everyday physical environment of citizens, thereby significantly contributing to the emerging smart home and smart public space.

RELEVANCE CALL 2013 objectives

The multiple use cases will clearly highlight the advantages of replacing wired solutions by wireless, including less weight in weight-sensitive environments, greater flexibility and re-configurability, easy cost-effective feature updates, novel "bring your own device" applications and more reliability through monitoring reduced tear and wear.

MARKET innovation

DEWI introduces the concept of a locally adaptable wireless "sensor & communication bubble" featuring:

- > Locally confined wireless internal and external access.
- > Secure and dependable wireless communication and safe operation.
- > Fast, easy and stress-free access to smart environments.
- > Flexible self-organisation, re-configuration, resilience and adaptability.
- > Open solutions and standards for cross-domain reusability and interoperability.

This concept, as realised through 21 industry-driven use cases, will tackle challenges including:

- > Dependable, auto-configurable, optionally secure, short-range communication.
- > Local energy-management: efficiency, harvesting, storage.
- > Localization of sensors and mobile devices.
- > Smart composability and integration of wireless sensor networks.

TECHNICAL innovation

DEWI, with its four industrial domains (Aeronautics, Automotive, Rail, Building), will provide clear gains for interoperability and cross-domain issues in the area of wireless sensor networks & wireless communication in terms of re-usability of technological building bricks along with architecture, processes and methods. Key results will be shown in attractive real-life "sensor & communication bubble" demonstrators, such as wireless sensor networks for civil rocket launchers or off-highway vehicle for wireless vibration monitoring. The project will contribute to emerging international standards, influence new regulations and lay the basis for efficient certification processes. Existing ARTEMIS Tool Platforms, the ARTEMIS Repository and ARTEMIS Sub-programmes will benefit from the concrete input of well-defined technology items and strategic input to other application fields, like healthcare.



PROJECT COORDINATOR Werner Rom	START 1 March 2014
INSTITUTION VIRTUAL VEHICLE Research Center	DURATION 36 months
EMAIL dewi@v2c2.at	TOTAL INVESTMENT € 39,61 M
WEBSITE www.dewi-project.eu	PARTICIPATING ORGANISATIONS 58
	NUMBER OF COUNTRIES 11

