WITH-ME

The European platform to promote healthy lifestyle and improve care through a personal persuasive assistant

EXECUTIVE *summary*

The With-Me project will create the With-Me ecosystem: a collection of embedded devices including **multi-purpose consumer electronics, dedicated health equipment and external information sources**, as well as the required computational environment supporting services and applications. The deployment in real environment pilots will deliver the evidence that people's adherence to healthier behaviours will improve by using persuasive electronic services.

CONTRIBUTION *to SRA*

With-Me intends to contribute to a number of SRA targets, namely:
> Reduce the cost of system design from 2011 levels by 15%
> Achieve 15% reduction in development cycles from 2011 levels
> Manage a complexity increase of 25% with 10% effort reduction, compared to 2011
> Reduce the effort and time required for re-validation and recertification of systems after making changes by 15% compared to 2011 levels
> Achieve cross-sectorial reusability of Embedded Systems devices and architecture platforms

As cited in ARTEMIS SRA *"Embedded Systems technology should no longer be considered in isolated application contexts but should be seen in relation to their contribution to the evolution of society and, in particular, to their contribution in addressing today's and tomorrow's societal challenge"*. With-Me targets directly this objective.

MARKET INNOVATION *& impact*

With-Me will provide consumers with a product suite that covers both health care as well as healthy lifestyle support. With-Me ecosystem ensures continuity of personalised assistance from lifestyle improvement to primary, secondary and tertiary prevention and care. Therefore, there is a clear market innovation as:
> The integration of information management in personal information spaces reduces the digital divide.
> Through the design of products with innovative user interfaces, With-Me will enhance the user experience, easing user acceptance and adherence.
> Safety and efficiency of health monitoring and healthy living support will be improved.

In the medium-long term, the following impact is expected
> Reduce visits to doctors and hospitals (including out-patient clinics)
> Make the periods of hospitalization shorter (when hospitalisation is necessary)

- > Increase longevity with improved quality of life throughout
- > Increase support to interdisciplinary care teams

RELEVANCE & CONTRIBUTIONS *to Call Objectives*

With-Me addresses the subprogramme ASP2 "Embedded Systems for Healthcare and Wellbeing", ", with a clear contribution to Call objectives as:

- > Gathering data by a large variety of sensors and controlling treatment by various actuators at home, on the move, at work, in health centres, clinics and hospitals.
- > Analysis of the gathered data.
- > Ubiquitous access to a citizen's health data. Supporting professionals and enabling adequate communication between partners.
- > System qualities such as interoperability with a reference architecture and design to support it.
- > Provision of sensors and actuators both portable and stationary, that are compliant to interoperability standards.
- > A stable, robust and extendable standard format for medical data.

Although With-Me addresses mainly ASP2, there are also other subprograms that are aligned with the objectives of the project, as the ASP8 (Human-centred design of embedded systems) and ASP3 (Embedded systems in Smart environments).

R&D INNOVATION *and technical excellence*

With-Me aims at providing a health prevention platform and personalized services in order to improve the general health condition and to prevent occurrence from a range of diseases. For that purpose With-Me is designed around three pillars:

- > Embedded platform for multivendor nomadic sensors,
- > Interoperable intelligent sensors for wellbeing monitoring,
- > Open architecture for persuasive electronic services.

The result of the With-Me project will be a customizable, adaptive, assistive and yet secure training/ supporting solution according to user preferences and needs. This personalized assistant is an interoperable ICT-based application that provides, mainly, seamless guidance and promotion of physical activity both indoors (in-home, gym club) and outdoors (joy parks, open-air exercising, children's playground, nature reserves, etc.) as well as healthy life (weight, diet, sleeping habits, and stress management).

With-Me offers a complete (from sensors to end users) and open (standardized interface) solution and seamless integration of interoperable nomadic and home sensor devices and health services. This is achieved through technological and application innovations centered on the three pillars mentioned above.

PROJECT *partners*

ARTEMIS
www.artemis.eu

WITH-ME

PROJECT COORDINATOR
Manuel M. Perez

INSTITUTION
Atos Spain

EMAIL
manuel.perez@atos.net

WEBSITE
www.with-me-project.eu

START
June 2013

DURATION
36 months

TOTAL INVESTMENT
€9.62M

PARTICIPATING ORGANISATIONS
20

NUMBER OF COUNTRIES
5