Note: The information given in this document is still preliminary until partner contracts and funding allocations are finalised.

Project Information

Project Short Name	BEDMOND
Project Full Name	Behaviour pattern based assistant for Early Detection and Management Of Neurodegenerative Diseases
Project Reference	aal-2008-1-026
Coordinator	Alberto Martínez
Organisation	Fundación ROBOTIKER
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Background of the Project

A health professional needs to know about the daily behaviour of an elderly person just to derive from it an early stage of cognitive decline, just to take decisions about early treatments. Up to date, the only valid information about is mainly provided by the person itself, relatives and friends in face-to-face appointments. Still remarking this direct but subjective information as pretty relevant for them, they would like to enrich it with more details, much more objective and accurate information such as that from ICT-based continuous monitoring of the activities of the daily living (also related to Ambient Intelligence and Ambient Assisted Living technologies). One of BEDMOND's basic underlying assumptions, re-confirmed by medical studies, is that a degradation of the cognitive health status leads to noticeable changes in the activity patterns. In brief, behaviour pattern changes may mean a cognitive decline beginning. With such early disease detection health professionals can later on apply an early pharmacological treatment which is proven to delay Alzheimer's disease appearance and consequently help the elder to live longer independently at home (so they wish).

Visions and Objectives of the Project

BEDMOND is an assistant for the health professional, a daily behaviour information provider to early diagnose mild cognitive impairment (MCI) stages as a first step of neurodegenerative diseases, focused in elderly people while living at home. It consists of:
- A tool for the caregivers at home to be informed about the last activities' performance;
- An alert tool to inform about home alarm signals and react quickly on high risky situations;
- A main support tool for medics to early diagnose neurodegenerative diseases.
This will be done:
* Firstly, by continuous tracking daily activities' performance of the elder at home, then compared with a set up and recorded behaviour pattern and intelligently ruled with health professionals` criteria to be applied after (diagnosis)
* Secondly, by periodical monitoring of user's behaviour evolution and trends for the doctor to determine a MCI beginning;

* And when it is determined, a pharmacological treatment can be applied in such an early stage. Then the support tool helps to monitor the delay of the Alzheimer's disease evolution.

Project Partners and Funding

| Full name	Short name	Country Code	Type of Organization	Final granted budget in EUR
Fundación ROBOTIKER (TECNALIA)	TECNALIARBTK	ES	RESEARCH/ACADEMIC	209.685
Center for Usability Research and Engineering	CURE	AT	RESEARCH/ACADEMIC	231.924
Fundación Instituto Gerontológico Matía	INGEMA	ES	END-USER ORGANIZATION	201.102
Meticube - Sistemas de Informação, Comunicação e Multimedia, Lda.	METICUBE	Po	SME	145.600
Bioingenieria Aragonesa S.L.	SABIA	ES	LARGE INDUSTRY	256.197
Austrian Research Centers GmbH - ARC	ARC	AT	RESEARCH/ACADEMIC	344.056
			Total	**1.388.564**

Additional Information
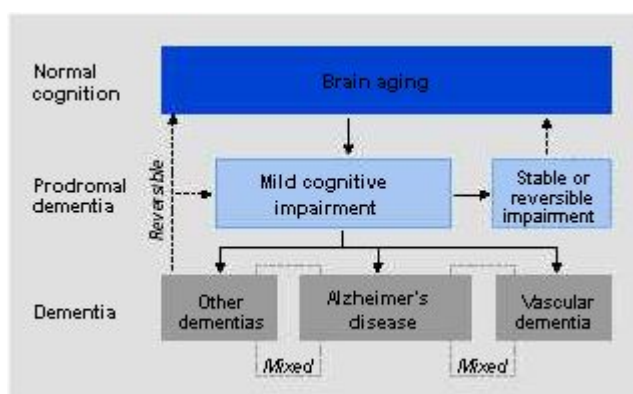
MCI as an early stage of neurodegenerative diseases.
Interest in MCI has been stimulated by the hope that pharmacologic intervention at this stage may delay or prevent progression to Alzheimer's disease, that's why the early detection of this upcoming life stage may surely be one of the best ways to enlarge time and quality of independent living at home.
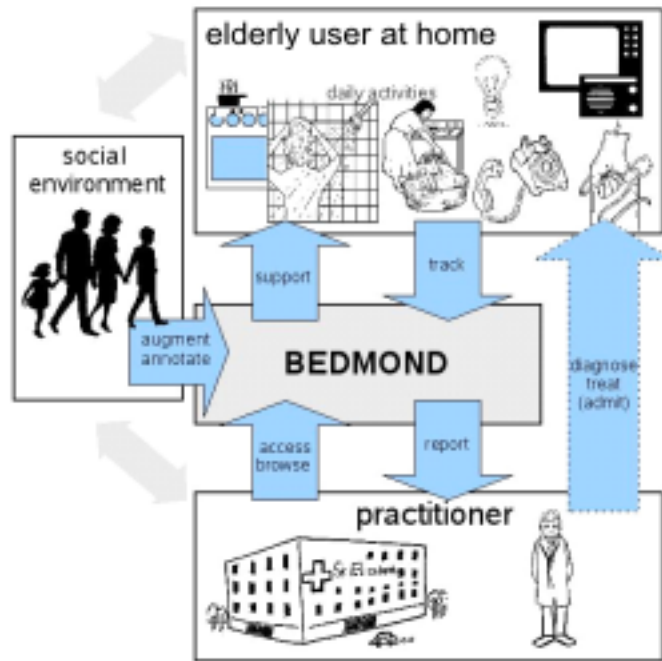
Overall concept of BEDMOND
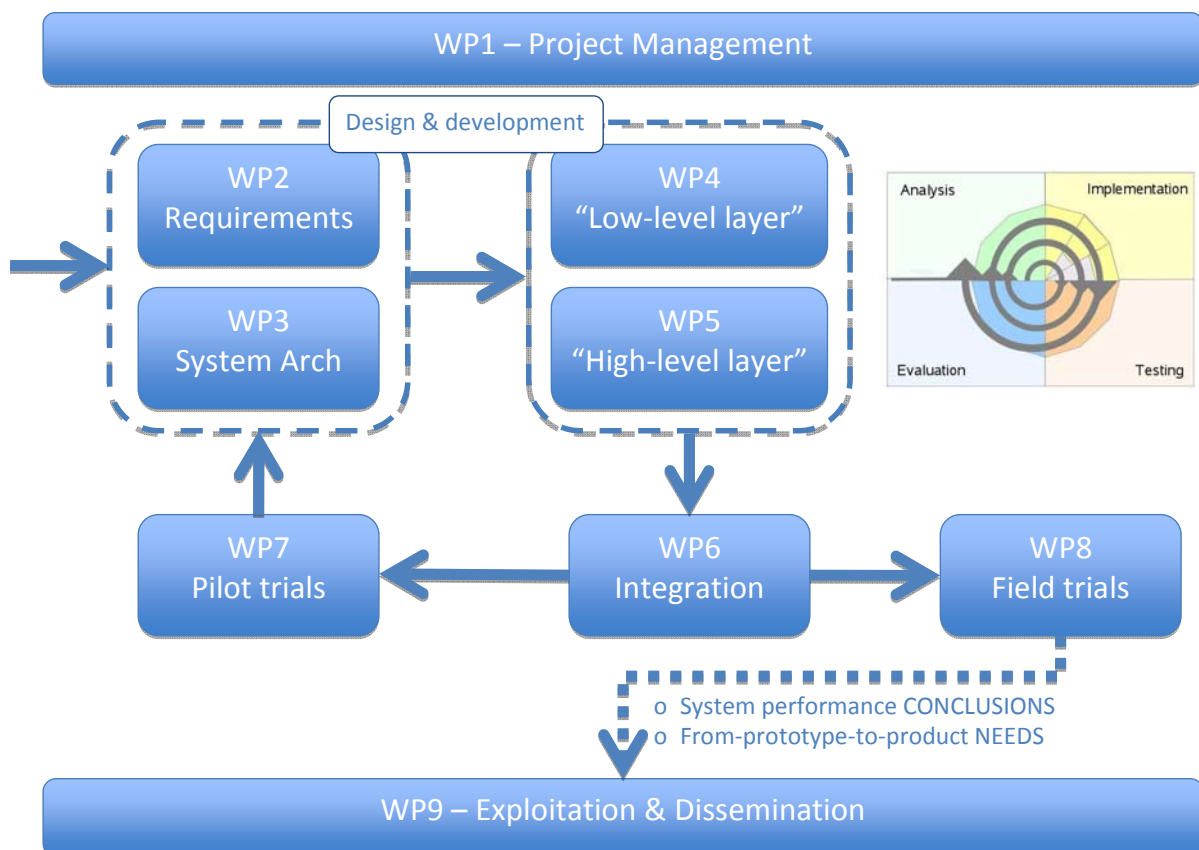
Workflow defined for BEDMOND, in a user-centric design cycle