

ISMB, Istituto Superiore mario Boella, Turin, ITALY

**Expression of Interests, 2007-ICT-FP7- 2, ICT PSP/CIP
joint R&D initiatives among ISMB and NEM partners**

The following work areas have been identified as potential FP7 – call 2 (CIP program, see attached information on related objectives) project of the interest of ISMB and probably for others NEM partners. Specific project ideas should be developed into full proposals with interested organisations; it may be decided later who should lead the proposal development. According CIP program:

(http://ec.europa.eu/information_society/activities/ict_psp/calls/call_proposals_07/index_en.htm), it is expected that the work can be carried out according to the following project configurations:

- **Type A** project: (at least 6 countries) contribution (50%) range from 5 to 10 M€
Implementation in a broader context for obtaining interoperability among existing national initiatives
- **Type B** project (at least 4 countries) contribution (50%) range from 2 to 3 M€
- **Thematic Networks** project: to address a common theme by bringing together relevant stakeholders, expertise for exploring new ways for implementing ICT based innovative solutions

Project 1 (type B) - ICT for accessibility, ageing and social integration

Scope: to provide monitoring solution to support independent living.

Demonstrator main issues:

- The project considers broadband network infrastructures (wire line, wi max, mobile) to validate assistive technology for aged people
- Use of wrist watch solution to detect vital signals (other existing apparatus could be considered and used) in combination of audio and video information on IP infrastructure
- Information available at control center and/or relatives on current wireless terminals
- Remote small towns trials; testing of service delivery, business sustainability, validation of operating workflow
- Each participant could use similar and interoperable infrastructures
- Exchange of service models, applicability in different social and geographic environments (small villages, mountains, dedicated homes, etc.)

Partners available: Research Institute, Applied Research, Hospital (aged, home assistance, extended hospital, Municipality)

Italian test-bed is available. ISMB might be end-user supporter too.

Project 2 (type B) - Accessible Digital Television for people

Scope: to provide monitoring solutions by new audiovisual based systems

Demonstrator main issues:

- To validate interactive DTV services for people with disabilities and older person

- Test bed based on DVB-T (Digital Video Broadcast) able to cope with management of medical parameters and educational information related to “style of life”. Also IPTV could be considered as possible platform
- Inclusion of health service providers and DTV operators and strong participation of real users

Expected output

- Suitable interface for reducing user confusion simple language and symbols, clear text and intuitive menu...
- Availability of simple authoring tool for develop applications
- Test bed based on DVB or IPTV (or both) with guidelines, manuals,

Partners available: Research Institute, Applied Research, TLC Company, Italian Broadcaster.
Italian test-bed is available. ISMB might be end-user supporter too.

Project 3 (type B) - ICT services for providing better personalised healthcare services

Scope: to provide monitoring solutions by new audiovisual based systems

Demonstrator main issues:

- Wimax based platform for providing advanced personalised healthcare service in orde to contribute to the continuity of the cure and improving the quality of the life
- Modular solutions in order to manage different deseases or multi desease in a single person

Expected output

- Innovative “tele-comfort” solution able to manage health data
- Validation carried out within real environment
- Validation of the complete value chain ; it will be included public organisations and the solution will be tested on the ground

Italian test bed- Verbania based on innovative Wimax platform and modular domestic network able to integrate several stand alone equipments

Partners available: Research Institute, Applied Research, Hospital, TLC Company

Project 4 (thematic network) - Wider implementation of RFID applications to the Health care sector

Scope: to mobilise stakeholders in order to improve experience sharing and consensus in the area of RFID technologies

Main issues:

- To bring together hospitals, healthcare institutions, technology providers, etc. in order to raise awareness of best practices and coordinate the development specifi approaches of RFID health care applications

- To improve efficiency of hospitals (e.g traceability of processes or objects..) and improvement of patient safety

Partners available: Research Institute, Applied Research, Textile Industry

Project 5 (ICT Call 2) – Virtual Physiological Human

Scope: to create and adopt models of disease, enabling to detect and forecast the disease's manifestation. The idea is to use diagnostic techniques and evolving pattern recognition coupled with some heuristics about the disease.

Main issues:

- To predict disease manifestation
- To enable to treat the developing pathology before the clinical manifestation
- To enable to contrast to a negative impact of some anti-blastic drugs, ...

Partners available: Research Institute, Applied Research, Hospitals for the clinical trial,

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