

e-INCLUSIION

ICT for an Inclusive Society - **RIGA** 11-13 June 2006





GOAAL: An action proposal of Governance & AAL for e-inclusion of elderly people

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No one left behind



EuroPACS-MIR 2004 in the enlarged Europe - Trieste, 16-18 September, 2004



to discuss and propose innovative and organizational solutions for the ICT-based integration of the health systems in the enlarged Europe



EuroPACS-MIR 2004 Integrating the Health Care Enterprise (IHE) workshop



Round Table on:
Integrating the
Health Care
Enterprise (IHE)
in the Central and
Eastern
European
countries:
need for a
transnational
committee?



EuroPACS-MIR 2004

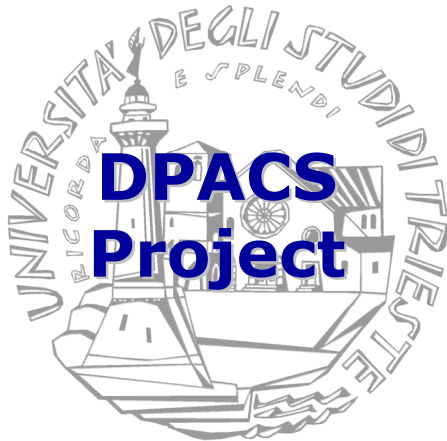
IHE round table actions proposal

- **an IHE transnational committee for 22 Countries**
 - the 17 Countries of the Central European Initiative (CEI), Greece, the three Baltic Countries and Russiawith the tasks to propose:
 - transnational IHE interoperability criteria (Technical Frameworks, Actors & Integration profiles)
 - guide-lines for the harmonization and the law framework of e-health in these countries
- **a Living-Lab “Consortium for Open Source in e-health”**, open to
 - **hospitals**
 - **territorial bodies / regional health information organiz. (RHIOs)**
 - **citizen home care / assistance institutions**



The LivingLab Open Three (O3) Consortium

OPACS / DPACS
projects
(1990/1995)
University of
Trieste



Raynux / MARiS
projects
(1998/2002)
University of
Padova





The LivingLab Open Three (O3) Consortium

Open Hospital



Open Territory- RHIOs

Open HomeCare & AAL

- An e-inclusive solution to cover the 3 main aspects of the future of e-health in Europe: e-hospital, e-territory, e-vital (tele-home-care, Ambient Assisted Living) with open-source strategy



The Open Three (O3) Consortium Community (Users and Developers)

- the international network ABIC-BME
- the international network ALADIN
- about 50 bilateral cooperation Agreements of the Higher Education in Clinical Engineering (HECE), University of Trieste, with
 - Hospitals
 - Medical Research Centres
 - Healthcare Enterprises
 - Industrial Enterprises
 - Governmental Agencies

Coordinated by HECE



Need for a governance and ambient assisted living (AAL) systematic approach

Open Hospital



Open Territory- RHIOs

Open HomeCare & AAL



GOAAL - Governance & Ambient Assisted Living Technologies: an action proposal for e-inclusion of elderly people

- proposed at IST-6 as Specific Support Action
- coordinated by University of Trieste, HECE
(with the laboratories: HTL, ANL, OSL, ELL, NML)
- **14 countries** (most ALADIN or e-ALADIN members)
 - covering all the European areas, included associated countries
- 20 partners



GOAAL – Partners & competences

- **2 European Associations**
- **1 no profit care organization**
- **5 enterprises, of which 4 SMEs**
- **2 multi-national research centers**
- **10 universities**

Competences:

- **ICT expertise, adaptive networks, living labs, AMI, Intelligent and vocal computer system, eHealth, eLearning, ubiquities and pervasive robotics, ergonomics, psychology, sociology, telemedicine, gerontechnology, geriatrics, project management and consultancy**



GOAAL Objectives (1)

- contribution to the development of a European Research Area in the field of “AAL for the Ageing Society”
- development of specific measures to help AAL Industry in Europe decreasing the gap between Europe and its main competitors – Japan and USA
- improving quality of life in enlarged Europe
 - **by building up an AAL roadmap for SMEs, Universities, researchers and no-profit organizations**
 - **the roadmap will be based on different temporal levels that are likely to lead to advanced applications for the AAL sector**



GOAAL Objectives (2)

- contribution to the usability and safety development of new AAL technologies for elderly people
 - strengthening the innovation capacity of European SMEs
 - enhancing their industrial competitiveness to contribute to the Lisbon goals.

AAL should be understood, developed, assessed and implemented into an integrated approach that considers the demand side, the supply one, the diverse context factors, and the specific properties of each AAL solution and its scalability, modularity, integration and customisation.



GOAAL Objectives (3)

- a roadmap as a tool to provide essential understanding and direction in the strategic planning of research agenda, guiding investment in and funding of innovative AAL RTD

Roadmap is needed for facing high uncertainty. 5 factors are particularly relevant:

- the expected net present value of a full commitment strategy (the expected value of exercising the option)
- the degree of uncertainty over the AAL estimate
- the threat of competitive pre-emption
- the loss of opportunity involved with not exercising the option
- other direct costs involved in maintaining the option, such as ongoing operating losses and the social and qualitative dimension.



GOAAL: special needs of elderly people

- **special living, communication, information and learning opportunities with respect to the younger population as support for:**
 - (a) independent, assistive and enhanced living in their preferred environment; for disabled (movement, hearing, seeing, up to intelligent patient monitoring);**
 - (b) easy communication: the ambient systems are growing to complex systems with a special user interface, requires training activities or (as more successful strategy) a special user interface using natural speech recognition and understanding functions;**
 - (c) communication, games and other features specialized for elderly;**
 - (d) special context based internet access for elderly;**
 - (e) special and tailor-made smart clothes;**
 - (f) special training activities for physical and psychical support.**



GOAAL synergies and liaison development with relevant project

AAL / Ambient Assisted Living - Preparation of an Art. 169-initiative, FP6-IST e-inclusion SSA
AMIGO/ Ambient Intelligence for the networked home environment, Open development platforms for software and services IP
ASK-IT/ Reliable and cheap drug delivery system for the elderly EUROSAGE FP6- SMES- CRAFT AIS of Agents for Knowledge-based and I.S. for Mobility Impaired users -FP6- IST-2002 e-inclusion IP
AUDABE/ wearable EMG Augmentation system for robust behavioural understanding
CLINICIP Close Loop Insuline Infusion ... FP6 IST eHealth
COCOON multi-channel delivery of semantically enriched e-Health content
ECOSPACE IP on Healthy, Comfortable., Safe and Sustainable Low Energy "Space"
EPERSPACE Towards the era of personal services at home and everywhere FP6-IST Networked audiovisual systems and home platforms IP
EURON/European Robotics Net. /FP6-IST2002 NoE
ENABLED/ enhanced Network Accessibility for the blind and visually impaired FP6 IST eInclusion
EUAIN/ EU Accessible Info Network FP6 IST eInclusion
HORIZON-EXPERTISE/ Innovative technologies for training disabled people);
IRIS Incorporating people with special needs into internet based application and services
LEGAL-IST providing policy roadmap for ICT
MAGNET My Personal Adaptive Global Net
Integrating the Health care Enterprise (IHE)
MAPPED/ Mobilisation and Accessibility Planning for people with disabilities FP6 IST eInclusion
MERMOTH/ Medical Remote Monitoring of Clothes FP6-SMES-CRAFT
MGBL/ Mobile Based Game Learning FP6 IST
MOVEMENT/ Modular Versatile Mobility Enhancement Technology FP6 IST eInclusion
Mouse models to analyse the role of telomerase in cancer and aging / Marie Curie Act
MyHeart / FP6-IST IST-eHealth IP GEnetics for Healthy PIPS/ Personalised Information Platform For Life & Health Services FP6 IST eHealth
Mobile monitoring and automatic fall detection device for elderly people living alone FP6-SME CRAFT
KASS/ Kinship and Social Security FP6-CITIZENS ¶2 Articulation of areas of responsibility and new forms of governance FP6 CITIEZENS STREP
"Telemedicare", FP5 Telematic Support for Patient Focused Distant Care, IST-1999-10754 1999 - 2002
Interreg III C project "Network for Future Regional Health Care" Nr. 2N0038N, 2004-2006
Interreg III A "ISCELS" n. BAFVG332286, 2003-2006.
Swedish IT fund supported project **Litmed**, Pilot Technical Platform & Telemedicine Appl. 2000- 2002
Swedish IT fund supported telemedicine project "Medweb II", 2002-2003
Pro-Access/ IST-2001-38626 2002-2004 (eHealth systems in EU pre-access countries)
RAIN Rural Area Interconnection to the Broadband IT Network », financed by EU structural
TELEMATICS-MOSAIC-HS/ Domotic stand. integration
TIDE-OMNI/ Intelligent wheelchair for severely disabled people)
TIDE-MOVAID / Rehabilitation robotics;
SPRINT-IMMEDIATE/ Integrated system for mobility and manipulation;
TMR-MOBINET7 Robotic technologies for mobility;
Aging FP6-LIFESCIHEALTH LSH-2002 IP
SUPPORT EAM/ Supporting the creation of an e-Accessibility Mark FP6 IST eInclusion
UBISEC / Ubiquitous Networks with a Secure Provision of Services, Access, and Content Delivery FP6-IST IST-2002. STREP
VALUE-HOSPIMOID (hospital robotics);
VE-FORUM FP6 IST



GOAAL program (1-2)

- **WP1 will offers critiques of the AAL world-class state-of-the-art**
- **WP2 will map, compare and assess best R&D results of a number of projects on AAL enabling elderly people to live independently in their preferred environment due to ICT support.**
 - **In this endeavour AAL will be fully assessed and reviewed considering also ethic dimension.**



GOAAL program (3-4)

- **WP3/4 will provide with know-how, approaches and methods for AAL focusing on end-user needs, requirements, behaviour and AAL societal dimension**



GOAAL program (5)

- **WP5 will provides**
 - a powerful workspace for doing the project
 - a dedicated, open-source based, **GOAAL e-SPACE** for information, dissemination, long-life learning, info-exchange and interactive consensus for the whole European AAL community
 - equipped with an open-source DB offering a detailed AAL description as well as references for ethical assessment and recommendations for future AAL research and implementations
- **The GOAAL e-SPACE will make use also of the platforms**
 - **VE-FORUM (6.FP)**
 - **Italian Slovenian Cooperative E-learning Space – ISCELS (INTERREG IIIA It/Slo)**
 - with new developments required specifically by GOAAL





Italian award for e-inclusion and accessibility to ISCELS





GOAAL program (6-7-8)

- **WP6/7/8 will contribute to structure the ERA by**
 - road-mapping and community building,
 - by drafting new R&D projects (Fp7,CIP,AAL169)
 - by providing a feasibility study for a dynamic PanEuropean platform on AAL
 - by enlarging network and disseminating results

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