COMPETITIVENESS AND INNOVATION FRAMEWORK PROGRAMME

ICT PSP call for proposals 2008 - ICT PSP/2008/1

Project Acronym: **Long Lasting Memories**

Project Number: **238904**

Project Type: **Pilot Type B**

Project Full Title: **Long Lasting Memories**

ICT PSP Main Theme addressed: **1.4: ICT for ageing well with cognitive problems, combining assistive and independent living technologies**

D5.2 Identification of national stakeholders in terms of local health and social care public authorities related financial models

Nature:	Report
Dissemination Level:	Public
Version #:	1.50
Delivery Date:	29th July 2010
Deliverable Leader:	AUTH
Author(s):	IDI EIKON, RALTEC, UCY, ESENIORS, INTRAS
Status:	Final
Reviewed on	28th July 2010
Reviewed by:	Costas Pappas

Abstract

The aim of this report is to identify for each pilot country the stakeholders of the LLM service as well as the corresponding existing financial model.

Document History

Version [1]	Issue Date	Stage [2]	Content and changes
#1.0	5th June 2010	Draft	Draft Deliverable Document and instructions created by EIKON (WP5 Leader)
#1.1	16th June 2010	Draft	Deliverable structure was updated by AUTH (responsible for this deliverable)
#1.2	8h July 2010	Draft	Draft document containing inputs from all partners
#1.3	14th July 2010	Prefinal	Draft document ready for internal review
#1.5	28th July 2010	Final	Reviewed by AUTH

List of participants:

1	ARISTOTELIO PANEPISTIMIO THESSALONIKIS / Medical School	AUTH	Greece
2	UNIVERSITAT KONSTANZ	UKON	Germany
3	ATHENA RESEARCH AND INNOVATION CENTER IN INFORMATION COMMUNICATION & KNOWLEDGE TECHNOLOGIES/ Institute for Language and Speech Processing	ATHENA RC	Greece
4	Tero Ltd	Tero	Greece
5	CEIT RALTEC gemeinnuetzige GmbH	RALTEC	Austria
6	INVESTIGACION Y DESARROLLO INFORMATICO EIKON SL	EIKON	Spain
7	Fundacion INTRAS	INTRAS	Spain
8	E-SENIORS: INITIATION DES SENIORS AUX NTIC ASSOCIATION	E-SENIORS	France
9	GLOBAL SECURITY INTELLIGENCE LIMITED	GSI	UK
10	GENIKO NOSOKOMEIO ATHINAS IPPOKRATEIO / Health Centre Vyronas	IGNA	Greece
11	Milton Keynes Council	MKC	UK
12	Municipality of Schwechat	SW	Austria
13	National and Kapodistrian University of Athens	NKUA	Greece
14	University of Cyprus	UCY	Cyprus

[1] Please use a new number for each new version of the deliverable. Add the date when this version was issued and list the items that have been added or changed. The 'what's new' column will help the reader in identifying the relevant changes. Don't forget to update the version number and date on the front page and the header.

[2] A deliverable can be in either of these stages: "draft" or "final". For each stage, several versions of a document can be issued. *Draft:* Work is being done on the contents. *Final*: All chapters have been completed.

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0. Executive Summary

It seems evident that for those aspiring to make a business in the realm of social and/or health-social care sectors, as LLM is, even if they are not the only ones, the state's role as the main provider of benefits to various groups and individuals becomes paramount. Some part of the private sector as insurance companies and banks, are together with public administrations, the other alternative central to LLM business.

In LLM actions will be especially taken at regional level, where it is more viable to create partnerships with public authorities, private companies, local banks, technical providers and foundations. In our understanding, this level of actions is a key factor for the rollout of LLM. This is why the Consortium believes that one of the main possibilities for policy to really help the deployment of LLM is by facilitating the building of real public-private partnerships. To this end we have incorporated three related tasks in this work package, which bear the objective of promoting actions towards this direction approaching companies like: Insurance companies, Health centres and Day care centres belonging to public and private institutions.

However, it is well known that public administrations (and with them local governments) have been “moderately” to “severely” affected by the financial crisis and are experiencing budget shortfalls.

The government wants to realize projects, but is confronted with private partners who aren’t always willing to sign up for Public Private Partnerships (PPP) based projects. Thus, is PPP currently still a good idea?

In ongoing projects, mainly maintenance projects, the governments are seeing a decline in income. Despite that, governments are willing to invest in new projects with the purpose of creating jobs and stimulate investments. On the other hand private partners are confronted with financial institutions who are less willing to hand out credits and with fluctuating interests. Banks have also become cautious. So taking on new loans for investments have become more risky and difficult.

The consequence of this is that private partners tend to work more together. Consortia are formed. The negative consequence of this is that the government has to negotiate with several more partners.

Summarizing LLM PPP concept is certainly not dead and still very actual. This form of realizing projects remains to be a very important instrument for governments to realize projects.

1. Information about the Service

Long Lasting Memories (LLM) project regards the market validation of an integrated ICT platform which combines state-of-the-art mental exercises against cognitive deterioration with physical activity in the framework of an advanced ambient assisted living environment. LLM will integrate and pilot in several European countries (Austria, Cyprus, France, Germany, Greece and Spain) an integrated service empowering the elderly to improve their mental ability, while at the same time boosting their physical being.

LLM aims at a unified solution that will combine independent living solutions with cognitive and physical training, according to recent research claims on the effectiveness of moto-sensory training on senior citizens with cognitive problems or mild dementia.

The service will overall target senior citizens with cognitive problems or mild dementia. It will be offered to end-users (aged individuals) at specialized care centres, but also within their home environment.

The LLM service and associated technology platform will feature the following innovative aspects:

- User Interfaces: touch screens or simple screens for interaction with the users. All system functionalities, including home environment management, cognitive training and physical exercising performance monitoring, are displayed and set from the Local User Interface, which is a touch screen. Remote User Interfaces for communicating with the relatives, care takers or authorities in the case of an emergency.
- Sensors: to monitor movements inside the house. They are deployed as a distributed network of wirelessly connected sensors that identify moving patterns and detect deviations from those patterns or falls. In these cases they notify the user's relatives or caretakers via the Remote User Interface.
- Facility to connect Instrumented Power Outlets: which are sensors measuring voltage and current (power) fed into appliances. These sensors detect of forgotten switched on electrical appliances.
- Both aforementioned sensor components guarantee the safe living of the elderly inside their home environments without need for exclusive intensive care.
- Facility to connect Actuators: which facilitate acts like opening windows, doors and blinds and are remotely operated with the Local User Interface. These provide the daily activity supporting feature of the LLM service.
- Processing units: an embedded processor and a general purpose PC which are used for coordinating and management of the AAL environment, for executing the cognitive training software and for storing and processing the physical training performance information. The cognitive training software that will be initially used will be the BrainFitness of PositScience. Subsequently, different cognitive training software packets will be used.

Overall, the successful conclusion of the proposed pilots will stimulate the uptake of innovative ICT based services and products in the area of ICT Assisted Cognitive Training and Social Interaction, which can enable a wide range of business opportunities.

1.1 Ownership

The service is being technically integrated by the technology provider of the Consortium. It will be provided by pilot partners responsible of the service in each one of the participating countries. The services will be jointly owned by the consortium (during the pilot operation). In the medium and longer term the business proposition is envisaged to create a PPP at local level by those partners committed with the exploitation.

1.2 LLM Stakeholders as identified by Consortium Partners:

Stakeholders are all those who need to be considered in achieving project goals and whose participation and support are crucial to its success. Defining who LLM stakeholders are (those who have a vested interest in the issues which the project is concerned) will contribute to identify:

- The interests of all stakeholders who may affect or be affected by the project;
- Potential conflicts or risks that could jeopardize the initiative;
- Opportunities and relationships that can be built on during implementation;
- Groups that should be encouraged to participate in different stages of the project;
- Appropriate strategies and approaches for stakeholder engagement; and
- Ways to reduce negative impacts on vulnerable and disadvantaged groups.

The participation of stakeholders in project implementation is a key to – but not a guarantee of – success. Stakeholder participation, in LLM project:

- Will provide a valuable feedback on how project results or policies may affect their lives;
- Is essential for sustainability;
- Generates a sense of ownership if initiated early in the development process;
- Provides opportunities for learning for both the project team and stakeholders themselves; and
- Builds capacity and enhances responsibility

Next table show one possible template that can help partners to easily position stakeholders.

Stakeholders are listed on the left-hand side of the page and boxes which relate to them ticked. If a stakeholder has several ticks means you can then identify it as central to your process. The table is presented completed in chapter 2.

Stakeholder	Responsibility	Influence	Proximity	Dependency	Representation	Policy and strategic intent

Criterion	Description
Responsibility	Stakeholders to whom you have a responsibility
Influence	Stakeholders with influence or decision-making power
Proximity	Stakeholders with whom you interact most, including internal stakeholders, those with long-standing relationships and those on whom you depend for day-to-day operations
Dependency	Stakeholders who are directly or indirectly dependent on your activities
Representation	Stakeholders who through regulation or custom or culture can legitimately claim to represent a constituency (including especially our clients)
Policy and strategic intent	Stakeholders whom we directly or indirectly address by policy or practice

In LLM there are two main stakeholders' categories:

- Internal
- External

1.2.1 Internal Stakeholders

Pilot-site (Country – Region)	Technology provider	Health/Care Service Organizations	Sustainability actors
Thessaloniki, Greece			
Project partners	AUTH		AUTH, TERO
Subcontractors			
Other collaborators		Greek Association of Alzheimer's Disease and Relative Disorders	
Athens, Greece			
Project partners	AUTH, ATHENA RC	NKUA, Eginitio Hospital	AUTH, NKUA, TERO
Subcontractors		Municipality of Ymittos	
Other collaborators			
Schwechat, Austria			
Project partners	RALTEC, UKON	Municipality of Schwechat	RALTEC
Subcontractors	Vienna Technology University		
Other collaborators			
Paris, France			
Project partners	eSENIORS, INTRAS		eSENIORS, GSI
Subcontractors		▪ OSE (Oeuvre Sociale pour l'Enfance) ▪ East Paris AGEP network for seniors ▪ MAPI Les Amandiers Retirement home ▪ Marne La Vallee Hospital	
Other collaborators			
Valladolid, Zamora and Salamanca, Spain			
Project partners	INTRAS		INTRAS, IDI EIKON
Other collaborators		▪ Memory Clinics, Valladolid & Zamora ▪ Alzheimer Reference Center, Salamanca ▪ Geriatric Center, Toro, Zamora	
Cyprus			
Project partners	UCY, GSI, ATHENA RC		UCY, GSI
Other collaborators		▪ Institute of Neurology and Genetics ▪ The Social Services Center of Ayios Dometios ▪ Elderly nursing home: "Golden Age"	

1.2.2 External Stakeholders

LLM expected target audiences of the project are likely to be comprised of three main groups:

- Health Authorities and Social Service Departments: Social and health care professionals, as well as healthcare insurers.
- Providers of Elderly Care: Public and private suppliers of social and health care services to elderly people.
- General public: In particular elderly people, who will be directly involved as users of the services considered by the LLM project; they will subsequently benefit from the project outcomes.

According to these audiences, described in D5.1, Influence, Proximity, and Policy and strategic intent, seem to be the central points to LLM in general terms. However, in chapter 2 the target groups are identified in detail, by each pilot country.

1.3 End users

Older people or main LLM end-users, do not represent a homogeneous population group as regards health situation, personal needs, aspirations and living circumstances. Commensurate with this, it seems likely that the relevance of, and demand for LLM ICT-based services and supports will vary substantially across the overall elderly population, and that particular subgroups may be more relevant for particular markets and/or types of service/products.

LLM targets older people living in their homes, but also older people living in specific sheltered housing / service flats for older people and older people at hospital and/or in a rehabilitation phase.

During the pilot phase of the project (short term i.e. within 2½ years after project start) the project will be piloted with nearly 1395 users (as analyzed in the section number of users below). Access and inclusion of the users to the LLM pilot, will be ensured via care centres and municipalities, partners and/or collaborators of the LLM consortium. Specifically, the consortium includes the following pilots' sites that will actively involve users under realistic settings:

Pilot-site (Country /Region)	Technology deployed	Raison d'être	Specificity (including Services deployed, possible inter-connection with another pilot-site, etc)
Thessaloniki, Greece	LLM system (ILC, CTC, PTC)	**Greek Association of Alzheimer's Disease and Relative Disorders** premises. Full service deployment in two (2) day care centres that will be validated directly to elderly that have Mild Cognitive Impairment (MCI) or Mild Dementia (Alzheimer Type). These centers have	Relatives of the elderly and specialties like Neurologists, Psychiatrists, Psychologists, Civil Servants and Physiotherapists will be involved. Not only elderly with mild dementia, but also elderly in need of support and aiming to avoid dementia will be

		earned the respect and acceptance of the local populations, are sufficiently staffed and committed to providing increasingly sophisticated services and its expert personnel	involved. Close co-operation with trials in Athens, Greece.
Athens, Greece	LLM system (ILC, CTC, PTC)	**Eginitio Hospital** Full service deployment in a medical service and prevention facility, serving a higher proportion of persons with mild to moderate cognitive impairment. It is a Formal Elderly Care with multidisciplinary personnel involved in the trials. **Municipality of Ymittos** Full service deployment in a recreation and social service community, providing ample space and physical therapy facilities, as well as trained supervisory personnel and will validate the service sustainability into primarily healthy aging persons.	ILC as eHome-installation to be used in training / therapy rooms together with CT and PT exercises. Significant access to the target population with an average socioeconomic status and communities with proven interest and efforts in enhanced social services and new technologies. The trial at Ymittos is formally linked to AUTh and the Thessaloniki trial, but supervised by both Eginitio Hospital (NKUA) and Athena RC
Schwechat, Austria	LLM system (ILC, CTC, PTC)	**The Municipality of Schwechat** Service deployment on five (5) home environments with installations focused especially on the Independent living of elderly, utilizing rehabilitation and Ambient Assisted Living technologies.	Validating health and care taking services for seniors living on their own at their homes. Results will be evaluated though the entire stakeholders value chain of Schwechat and the European community, through the Network of European Living Labs to which Labs Schwechat belongs. The trial is formally assisted and supervised by partner UKON.
Paris, France	LLM system (ILC, CTC, PTC)	**OSE (Oeuvre Sociale pour l'Enfance)** Service deployment on this day care center for seniors, handicapped and MCI people, that will focus on the combination of cognitive and physical training. **East – Paris AGEP network for seniors** Full Service deployment with 2-3 "At Home" installations for elderly people in East Paris. Through AGEP institution we anticipate a wide dissemination of the results of the trials to the elderly people in the region. **MAPI Les Amandiers Retirement home** Full service deployment at a private retirement home hosting elderly residents from autonomous and semi-dependent to ones suffering from mild dementia and cognitive deterioration. Set up of "Day care centre" LLM installation type to provide training for the entire population of the institution.	Wide dissemination of results and stakeholders involvement, especially in the East Paris region. Validation of LLM service both in Homes and health/care centers. The trials are going to be assisted by expert monitoring by partner GSI and medical; assistance offered by partner INTRAS.
Valladolid, Zamora and Salamanca, Spain	LLM system (ILC, CTC, PTC)	**Memory Clinics, Valladolid & Zamora** Full service deployment in a Day care center involving a team of psychologists who developed research and intervention projects to improve the quality of life of the elderly and the people with disability in the field of new technologies. **Alzheimer Reference Center, Salamanca (Day care center)**	INTRAS having developed their own software for memory training (GRADIOR) will validate the CTC of the LLM system with both the BrainFitness software and the Gradior software. Memory Clinics of Valladolid and Zamora they are already providing GRADIOR courses, aiming at training

		Full service deployment in a Day care center at national level. A public center, specialised in evaluation of the best models for sociosanitary services and the improvement of the quality of life of people suffering of Alzheimer and other dementia as well as their families and carers and support training of professionals and of carers. **Psychosocial Rehabilitation Center of the Zamora Province Hospital** Full service deployment in a Public hospital of the city of Zamora that will validate the potential of the LLM service to the special unit that exists for the families and the carers of the patient, aiming to provide the families with the possibility to leave the patients for specific moments, where they will be fully monitored and controlled. **Geriatric Center, Toro, Zamora (Day care facility).** Service deployment at a day care facility for elderly that will validate the potential of the LLM service to be offered together with the existing supporting services to people with mental illness, among them elderly people.	in the traditional cognitive rehabilitation systems. Memory training sessions addressed to the elderly are carried out for about ten years in order to improve their cognitive skills.
Cyprus	LLM system (ILC, CTC, PTC)	**Formal Care facilities in Neurology Clinics of the Institute of Neurology and Genetics** The pilot locations will be the Clinics and day care centres founded and supervised by the Cyprus Institute of Neurology and Genetics **Senior centre: The Social Services Center of Ayios Dometios** (multipurpose center) is a non profit private organisation responsible for elderly people health care in the area of Agios Dometios. **Elderly nursing home: "Golden Age"** is a private residential institution for providing care and support to elderly people who are unable to look after themselves. **Individual home(s)** Full service deployment in 1-2 individual homes	Full LLM service deployment in a new EU Member State, conforming to a multiplicity of different environments and types of elderly centres, all coordinated through the University of Cyprus. Close co-operation with trials in Athens, Greece. The trials are going to be assisted by expert monitoring by partner GSI.

Aged users, been the actual end users of the LLM solution, may experience the system in both care centres as well as their homes. The project has established a common homogeneous and unified approach to cognitive and physical training to be applied across all pilot sites. This unified approach includes common methodologies for technology development, service deployment, elderly cognitive assessment, validation and evaluation, which will be uniformly applied across all pilot sites. Following the end of the project, the service will be offered to other communities of aged people all over Europe, derived from the project's Marketing strategy and associated business plans.

2. Target groups identified by pilot country

Pilot/Country	Stakeholder	Responsibility	Influence	Proximity	Dependency	Representation	Policy and strategic intent
Austria	Insurance Companies		✓				
	Social Services Departments		✓				✓
	Residential Facilities		✓				
	Telecom & Internet providers			✓			
	Caretaking organisations		✓	✓			✓
	Geriatric Clinics					✓	
	Organisations addressing directly elderly people			✓			✓
Cyprus	Public Social Services Departments		✓			✓	✓
	Private Social Services Providers		✓	✓	✓		
	Insurance Companies:						
	▪ Private					✓	✓
	▪ Public		✓			✓	✓
France	Residential Homes for the Elderly	✓					
	Long-term Hospitals	✓	✓				
	Centres d'action sociale (Social care centres providing services to the municipal communities)		✓	✓			
	Associations of Elderly people and/or their carers:		✓				
	State Secretariat for the Elderly		✓				✓
	State Secretariat for digital development						✓
Greece	People at Home			✓	✓		
	Public Administration ▪ Day Care Centres, Elderly Assisted Facilities; …	✓	✓	✓		✓	✓
	Private Organisations: ▪ Day Care Centres, Elderly Assisted Facilities; …		✓	✓	✓		
	Insurance Companies:						
	▪ Private					✓	✓
	▪ Public		✓			✓	✓
Spain	Private and non profit making entities	✓	✓	✓	✓	✓	✓
	Public entities: ▪ Memory clinics, Geriatric units, Hospitals, Psychiatric departments, etc.)				✓		✓

	▪ Social care centres providing services to the community						
	End-users: Elderly people and/or their carers: ▪ 60-70 ▪ 70-80 ▪ 80+					✓	

It is clear the consortium is including and strongly following stakeholders with influence or decision-making power and are involved in policy making. This can show the overall approach and understanding of the pilots that recognise the necessity of targeting high in the decision-making level that can more easily understand the social benefits of the service and are have the ability to promote the deployment of the service.

In Austria, main stakeholders are including especially caretaking organizations that have the influence, decision-making power and policy and strategic intent. The stakeholders currently involved are organizations with whom they interact most and have long-standing relationships.

In Cyprus, the main target group are Public Social Services Departments, Private Social Services Providers and Public Insurance Companies, while in France are long-term Hospitals and Social care centres.

In Greece, it is planned a strong link with the Public Administration, being the actual target group, having under responsibility Day Care Centers and Elderly Assisted Facilities.

3. Market Forces

The "ICT & Ageing" market represents a complex public-private mix of players, from device manufacturers to health and social care service providers that interact and have roles to play in ensuring the deployment and use of technologies.

It is recognised that market forces alone have been and are likely to remain insufficient to ensure the realisation of the potential in this field. Public policy efforts are therefore also required.

From the supply side perspective, in particular, the market for ICT-based supports for homecare and independent living, present some core issues that warrant attention from a policy point of view:

- need for well-functioning supply chains (devices, systems, services, installation..)
- achieving critical mass / commercial viability
- standards / interoperability
- functioning of internal market.

3.1 Core dimensions

3.1.1 Supply chain issues

The implementation of ICTs to support homecare and independent living involves a number of components that all need to be in place and to work together in a well functioning supply chain. In LLM this includes manufacture, supply and installation of end-user and home devices/systems, monitoring/response centre infrastructure (both hardware/software and organisational), and systems and processes at the service-provider end.

In LLM supply chain exists for:

- **Hardware Supplier of IT-devices that may be needed (internal)**
  - PC's, Servers, Routers & Networking devices, peripheral equipment like USB-I/F-devices, headphones, etc) and
  - Third parties devices (external providers)
- **Physical training equipment-devices like: (external providers)**
  - Wii remote, Wii Balance Board, supplementary Wii devices, mini-homes bikes and optional ergometers, treadmills, etc.
- **Software components**
  - LLM-DB

  - LLM-CMS
  - LLM ILC-SW (e.g. eHome: LLM-partner RALTEC + 3rd parties)
  - PTC-SW (e.g. FitForALL: LLM-partner AUTH)
  - CTC-SW: LLM Consortium/ third parties adaptations (currently BrainFitness; GRADIOR, optional: other solutions)
- **Software development/adaptations: LLM-partners and third parties**
- **Account management (to be develop within a future LLM-company**
- **Software and Hardware installation support:**
  - Technical operational support
  - 1st level support, at local / regional operators sites
  - 2nd & 3rd level support, at SW-/HW-suppliers sites (LLM-partners and 3rd parties)
- **Operational support**
  - medical / therapist support (remote and on site)
  - care taking support (especially for at home installations)
  - emergency centre

3.1.2 Achieving critical mass / commercial viability Issues

To achieve critical mass or other forms of commercial viability, in a very complex marketplace is LLM main challenge and the question is how to make it to reach mainstreaming.

Older people have widely varying needs and circumstances and across Europe there are widely varying health, social care and housing systems. To address this LLM will offer a relatively standardised solution to include mass markets, but also an individually-tailored /customised solution. Both alternatives have their own challenges and issues to be addressed in order to achieve market success.

The LLM Service offers a modular and scalable approach:

- Based on the integration platform LLM-CMS there is the possibility to scale different LLM solution types consisting only of one component (e.g. only a certain CTC), or of 2 or 3 components with all variations of integrated components.
- The modularity of the system also allows adding new components to the system.
- For the use in formal institutions like Day Care Centres or Senior Centres the system may consist of one or more PTC's and one or more CTC's and makes use of the manual alarming function, communication and information features of ILC.

- For the use in home installations the LLM can make full use of a complete ILC-configuration consisting of a network of sensor and actors to support a safe and independent life and of CTC and PTC (using only small and cheap physical training devices).

The above described configuration scenarios are targeted for individually tailored solutions. On the other side standard configuration types consisting of e.g. one PTC-type, one CTC-type and standardized ILC-configuration can be defined and sell as mass products.

3.1.3 Standards / interoperability Issues

As the telecare, home telehealth and smart home fields develop, an ever growing array of devices and systems are emerging, and also the supply side is increasingly looking beyond local and national markets to the wider European and international marketplaces. Interoperability has thus become an important issue by those who are seeking to implement services.

LLM is designed as a modular and scalable system and as such it uses open standards for integration of the different components: Webservices, TCP/IP, http, shttp, SIP (for telecommunication).

Apart from interoperability considerations, an important emerging issue concerns quality standards in relation to the stability/reliability of technology offers. Linked to this, there is also the wider issue of ongoing technical support, maintenance and so on, and who should provide this over the lifetime of technology usage.

Technical support and maintenance will be provided by the future LLM company working together close with suppliers of the integrated components and hardware and software platforms.

3.2 Functioning of internal market Issues

LLM will have to deal with the complexity of the processes whereby new products and service innovations come to be included within the standard portfolios of the mainstream social care and health care services, on 'lists' of reimbursable products and services, and so on. This is probably LLM main concern affecting the smooth functioning of the internal market.

In LLM, the public partners and public institutions of the Consortium (namely, AUTH, NKUA, UKON and UCY) as well as public authorities implicated in the piloting phases (like the Municipality of Schwechat) have good knowledge of the (often complex) local rules and processes, and work close with the service providers and other relevant stakeholders (e.g. third party payers).

3.2.1 Technological innovation Issues

Although the evidence and analysis suggests that technology limitations are not the critical rate-limiting factor for the wider implementation and mainstreaming of ICTs to support independent living and homecare for older people, there remains a continuing need for further technological innovation. This concerns both the development of new/improved systems and devices and the co-evolution of technology and services.

The strategic objective of the LLM project is to integrate two existing ICT solutions with physical training equipment, thus delivering an innovative system for ageing well and validating the resulting service in various sites all over the EU. The reasoning behind our project is our belief that a unified solution of different components from ambient-assisted living and selft-training will be able to surpass existing unilateral approaches.

The LLM service will provide its innovative service by integrating two already existing successful ICT solutions ILC Independent Living Component and CTC Cognitive Training Component), thus basing its service on existing partial solutions. The third system component PTC Physical Training component is comprised of regular home training equipment and can be roughly described as an ICT solution, but more as another component that will be further integrated to the delivered system to provide additional features to the LLM service.

Thus we can see that LLM basic technologies and system components already exist and the main market barriers relate to issues of acceptance and incentives.

The original design of the project had made a preliminary definition of the types of equipment that would be used (treadmills, etc.), however, as an outgrowth of both technical and market-based review of our option, it has been determined, that to make the LLM system financially accessible to the broadest number of users, to put in place a solution more costs effective was needed. As a substitute of costly equipments to train, Wii peripherals have been integrated into the LLM system, although this has required some additional significant investment on the part of technical partners. However, once the technical work accomplished, the acquisition of the equipment, because it is off-the-

shelf will present no problem (we hope) and will rather contribute to make more affordable LLM and thus open to a wider users audience.

Given the nature of the 'intermediated' market in this field, service and technology co-evolution is also a key consideration in relation to technological innovation. There is also the important 'chicken-and-egg' challenge in this marketplace, where industry may be reluctant to invest in products without an expressed demand from service providers whereas the latter cannot get engaged unless there are products to work with.

LLM needs to be continued in the real world of service provision and its big challenge is to go from the proof of concept stage to full 'productisation' / commercialization.

3.2.2 The policy-challenge

Social policies at European level take place mainly at regional and local level and a general trend is that delivery of services is more and more locally organised, close to where older people lead their daily lives.

Regions are closer to citizens and aware of regional and local problems and are in a position to create the conditions for industrial policies. Thus to facilitate the creation of regional or local seed communities for a LLM economy, we should get the commitment and cooperation of regional and local political actors.

The engagement of key stakeholders (especially health and social care providers) in this field to date is one of the biggest barriers to wider implementation and mainstreaming at present.

This is why LLM understands that designing a business approach should be taken at this level and when it comes to sustainability, a first considered is a public-private partnership undertaking.

Using a cross-country perspective, to enable examination of commonalties and differences across partners countries that may arise, because of different national social and health care systems and different levels of technological readiness, is very useful to our purpose.

We need to do a closer examination at each partner country situation of these markets for gaining a better and more concrete understanding of LLM market potential and of the real-world factors that are facilitating or hindering its market development in the general field of ICTs and independent living for older people.

In LLM ICTs are to support cognitive and physical training for elderly people inside the framework and safety of an assisted living environment. However, the potential offered by technology also extends to other domains, including remote social care to the home (telecare).

3.2.3 Public-Private Partnerships

Public-Private Partnerships (PPP) are now firmly established in the European political landscape as a means of public service delivery. Their use has grown rapidly in recent

years and the main drivers – particularly the gap between the financing needed to modernise infrastructure and improve public services and the public funds available at EU, national and sub-national level – are as strong as ever.

Initially conceived and used for big infrastructure operations, there are strong pressures both in old and new EU Member States driving public authorities to use PPP as a means of delivering public services. These include budgetary pressures (in or out of the Euro zone) leading to the need for cost reduction, the pursuit of better revenue collection and limitations on resources available for public financing of infrastructure investment, as well as pressures from citizens as consumers with ever higher service expectations. In some cases public entities seek also to use PPP as a way of introducing private sector management skills for different methods of service delivery and to use public assets more effectively. As a result, PPP is being used for an ever wider range of public services.

For LLM, an ICT solution that could be included among the prospects (different devices, sensors, services and 'things') getting online, where a mere technological response is not enough to rise to the challenge of these trends, PPP is no doubt an exploitation alternative to consider.

For service providers, PPP are complex instruments and require a set of specific skills within the public sector, in order to ensure the public interest is properly served. They may require committing significant resources at the preparation and bidding stage and often involve important transaction costs.

4. Establishing the LLM case

4.1 Current Market situation

In D5.1 we addressed the market at a general level and in each of the partners countries.

Connected to the population ageing phenomenon going on worldwide, Information and Communication Technologies (ICT) potential, are receiving a lot of attention during recent years.

ICTs are seen to present an opportunity for a "win-win-win" outcome, whereby needs of older people are met in a high quality manner, the costs of providing care and support are maintained at manageable levels for society, and new market opportunities open up for ICT-based products and services.

LLM can be counted among existing and emerging ICT-based products and services that have relevance for meeting these various needs and objectives.

However, in practice, mainstreaming of ICT-enabled solutions within real world service settings has to a large extent yet to occur. Many are the challenges and barrier to overcome.

Although needs of older people for an independent living and homecare are very heterogeneous, three main market segments structure typically the service delivery landscape in Europe: **social care, health care and housing**.

In the **"ICT & Ageing – Users, Markets and Technologies"** study, report prepared by empirica and WRC on behalf of the European Commission, Directorate General for Information Society and Media, Telecare is referred to provision of social care from a distance supported by telecommunications, distinguishing between three generations of telecare, based on an evolution of the traditional "social alarm" model:

First-generation: uses a simple telephone unit and a pendant with a button that can be triggered when help is required by the user; monitoring centre systems receive the call and identify the caller and their address; initial diagnosis of the nature and urgency of the need can be explored by voice link; nominated response personnel (informal or formal carers) are alerted as required by the situation, following an established protocol.

Second-generation: this adds a "passive" or automatic alarm dimension (no need for the older person to actively trigger the alarm) enabled by the implementation of sensors such as smoke, fire and flood detectors, among others, in the older person's home; when activated, these trigger an alert to the call centre and initiate the necessary response.

Third-generation: these are a more advanced type of telecare service, which collect everyday activity data automatically through various sensors such as front door open/close detectors, fridge open/close detectors, pressure mats, bed/chair occupancy and electrical usage sensors; data is presented to care personnel or family carers to monitor wellbeing and assess the need for help and support.

Other trends also need to be considered in the examination of telecare market developments, as are:

- Mobile telecare: mobile phones and GPS systems in principle enable the traditional home-based telecare services to provide to older people when they are out and about
- Video-based telecare: visual communication is enabled between older people and carer personnel or family carers; purpose may include social communications and/or visual monitoring of wellbeing.

Telecare, home telehealth and **smart homes/assistive technology**, all of them inside LLM focus, aligns closely with previous segments, reflecting the reality of the marketplace today, especially the separation of social care (and hence telecare) and health care (and hence home telehealth).

However, technologies (and smart home technology among them), are currently being shaken up by technological developments. Better interoperability between technical standards has opened up new possibilities for more flexible and easier to use systems with modular functionalities in entertainment, security (including care services) and comfort. With technology changing at a fast pace we need to be watchful of the trends that will impact, no doubt, our business.

4.2 Main Competitors within the Cognitive Training Arena

As already mentioned and listed in D5.1, there are several solutions that have already made a name in the market of cognitive training. LLM is integrating in its offer one of the most well known applications in this area (PositScience with its product Brainfitness).

However, we should not lose out other players in the field that have adapted to today demands offering competitive solutions online.

To compare against, we have pickup two of the solutions already in the market, the Israeli Cognifit company (contributing in other ongoing project: Vitalmind), and (more interesting according to our point of view), the Happy Neuron proposition, a subsidiary of Scientific Brain Training (of French origin but already very popular in US -subsidiary located in California) and widely represented in different countries across Europe. Their ability for offering attractive online services at a reasonable price is an advantage that other, probably better positioned firms have not achieved yet.

Most important however, in the LLM case, is the fact that one of its partners, Intras Foundation is serving this market with a product of their own (Gradior), until know addressed to the Spanish (and South-American) markets, but with plans to be adapted to any other audience worldwide. Gradior main difference when compare to other market solutions, is, a totally personal focus requiring a personal interaction: user (or patient) / expert (doctor). Coaching is done on a personal basis requiring many efforts. There are many people within the field that believe this is the only way to obtain credible results; others with a much more aggressive marketing addressed to general audiences, differ

totally from this opinion: the battle for "scientifically" proven results is an always open issue between both visions.

When it comes to a marketing strategy, both perspectives require totally different strategies, personal supervision demands is a big efforts consumer and (usually) is against a massive deployment generally only possible if unattended.

The Gradior alternative will be also tried in the piloting of LLM, namely in the French and Spanish pilots.

LLM implementation is multi-faceted. Overall we have identified four levels (see next table) and all of these need to be addressed simultaneously.

1	Central Government level
2	Locality strategic level
3	Community/neighbourhood level
4	Individual level

Even where local strategic planning mechanisms do exist, they are likely to focus on specific groups of adult social care service users, such as people with learning disabilities or mental health service users.

However, in most of the European countries there is still no consistent governance framework in which commissioning can operate across all needs and all partners. Bringing public sector organisations together with each other and with the private, business and community sectors to tackle issues that require coordinated action across a locality seems to be the logical answer. Providing a local governance framework starting by serving older people and that could be extended to other client groupings, could be a good answer.

4.3 LLM Value Vision

One of LLM's "unique selling point" when considered from a market point of view, is the fact that beyond being at the same time a physical and a cognitive training system, it also embodies the ILC which makes the user's training safer, and if/when used at home, makes the user's home safer also. In other words, LLM, with all three components differentiates from the "seemingly similar products", not to mention the recognised qualities of Gradior, clinically tested over a large scale, and the pre-supposed intrinsic qualities of BFP.

5. LLM: Way to Financial Sustainability

The challenges, determining the development, adoption and diffusion of new technologies, are different national patterns, regulations and policies, a heterogeneous industrial situation, a set of various payment systems and social approaches. As a sample, despite availability of technology for years smart home technology remains to be widely implemented.

In the field of ICT & Ageing, the engagement of key stakeholders (especially health and social care providers) is one of the biggest barriers to wider implementation and mainstreaming at present.

The public partners and public institutions of the Consortium (namely, AUTH, NKUA, UKON and UCY) as well as public authorities implicated in the piloting phases (like the Municipality of Schwechat) are leading initiatives across Regional Governments in Europe to share the new opportunities raised from the new framework and growing acceptance of Public–Private Partnerships (PPP) arrangements.

Before designing a Business Plan LLM for up-scaling LLM initiative, Consortium needs:

- Identify who national stakeholders in terms of local health and social care public authorities are (identify stakeholders that value our offering) and how they move in order to approach them with the most suitable LLM proposition.
- Establish the structure and approach for the implementation of the LLM business
- Define resources and roles required to support LLM service with its ongoing operations and implementation efforts
- Identify what is LLM UVP (Unique Value Proposition). A UVP is a succinct statement of the uniqueness of a product/service that sets it apart from all others. A UVP statement must contain quantitative statements about the uniqueness of a product/service. Precisely WHY should customers do business with us? A competitive analysis helps to develop a UVP and test the validity of the claims we make about our product.

These actions if proven to be successful will lead the Consortium to the creation of a new LLM Company, very flexible to reach any kind of commercial partnerships agreements with local business deployers.

Current pilot partners position in relation to LLM exploitation

	LLM PILOTS					
	GREECE		AUSTRIA	SPAIN	FRANCE	CYPRUS
	Thessaloniki	**Athens**	**Schwechat**	**Valladolid Salamanca Zamora Toro**	**OSE AGEP MAPI**	**Clinic Senior Centre Nursing Home At Home**
Market Identification						
Have you identified the market target(s) of LLM?	Yes (80%)	Yes (80%)	Yes (80%)	Yes Mainly social-health professionals at care organizations with Gradior component	Yes	Yes Private and public health and social health organizations
Have you identified LLM potential stakeholders in your country?	Yes (75%)	Yes(75%)	Yes (75%)	Yes. Private and public health and social health organizations. We do not know if insurance companies will be interested. Maybe caretakers-related organizations	Yes A list of key strategic people has been provided ("Vivre chez soi" report's list). Yet, strictly "commercial/industrial" stakeholders cannot be identified at this point in time due to the lack of economic visibility so far.	Yes Private and public health and social health organizations
Do you have a clear vision of the costs for running LLM as a commercial product?	Not yet	Not yet	Not yet	Not yet The first results of the pilots will shed some lights	Not yet	Not yet
Ongoing contacts						
Have you already made contact for the sustainability of the project?	No	No	Yes	Yes Until the moment one potential customer (National	Yes	Yes

					Reference centre for Alzheimer and other dementias)		
Did the project raise interest of public actors?		Yes (10%)	Yes (45%)	Yes	See previous comment	Yes	Yes
Did the project raise interest of private actors?		Yes (10%)	Yes (5%)	Yes		Yes	Yes
Your personal position towards LLM business							
Do you plan to be directly involved in LLM business after the project?		No	No	No	Yes	Yes	No
OR did you identify who could be in your country?		Yes	Yes	Yes	Not yet, but it is an option to consider		Yes
OR will your work in WP5 be done for the interest of the Consortium		No	No	Yes	We will try it to be useful		We will try it to be useful
Commercial launch							
In your country, would LLM be sold :							
a.	directly to elders	No	No	No	No	There is always the market of "prevention products" consumers. But it is supposed fairly narrow.	No
b.	to public authorities	Yes	Yes	Yes	Yes Health and Social Care organizations	Providing the trials have been decisive enough, Long term hospitals and "établissements de soins de suite et de réadaptation" might be interested.	Yes Health and Social Care organizations
c.	through 3rd party(ies) (mention which)	Yes, Investors, Research projects	Yes, Investors, Research projects	Yes	Directly or through third parties	The question of LLM's polymorphism is asked again: "with or without e-Home?" : different strategies for different products.	Yes, Investors, Research projects

			Greece -1	Greece -2	Austria	Spain	France	Cyprus
Who would pay? (multiple choice)								
a.	the elders		No	No	No	Not very feasible		No
b.	their relatives		No	No	Yes	Probably but only with a co-payment contribution		No
c.	public bodies		Yes	Yes	(Yes)	Yes	So far, the product is not a "medical device": social security won't pay.	Yes
	i	at local level	Yes	Yes	(Yes)	Interesting Mainly Local and Regional	Some Centres d'action social (municipalities) may perhaps consider buying or hiring.	Yes
	ii	at national level	Yes	Yes	No	Interesting But more difficult		
d.	private companies		Yes	Yes		Perhaps	Perhaps fitness clubs with a programme for seniors ?	
	i	Insurance companies	Yes	Yes	Yes	We have not had the opportunity to explore this option yet.	We have not had the opportunity to explore this option yet.	No
	ii	Telcos companies	Yes	Yes	Yes	We have not had the opportunity to explore this option yet.		Yes
	iii	Other (describe)					Private seniors Clubs?	

		Greece -1	Greece -2	Austria	Spain	France	Cyprus
What help needs LLM to reach the market?							
a.	National helps (financial help for elders; national project calls)	Yes	Yes	Yes	Yes Financial help is very important	Public recommendation to potential prescribers and users	Yes
b.	LLM services integrated as a public help service	Yes	Yes	No	Indispensable		Yes

c.	EC structural funds	Yes	Yes	Yes	To be explored	Perhaps in those really poor areas	Yes
d.	Private investors to develop the business or the company	Yes	Yes	Yes	To be explored	Seems to be a key factor: only they can be close to the markets and have the energy to continue developing the product/system/service.	Yes
Temporary conclusion							
Do you have a good vision of how LLM could be sustained after the end of the project in your country?		Not yet	Not yet	Not yet	Not yet	We'll have a better vision after the trials.	Not yet
Is the sustainability of LLM now :							
a.	a matter of time and efforts	Yes	Yes	Yes	Yes	Market research and intelligence would play key roles in that regard	Yes
b.	something to be discovered	No	No	No	Something to address more in depth	Again, lets have a look at the trial results !	No
Chances for sustainability are: null / poor / correct / good / excellent		Good	Good	Correct	Depending on the final service to be commercialized, prices, IPR issues. To be defined but at first sight correct	Depending on the final product or service to be commercialised, prices, IPR issues, after sales service, medical advice and/or support, further developments, etc. To be defined but at first sight correct	Good

LLM seems to have high possibilities to be marketable. All the answers for its sustainability are positive; however this is somehow contradictory with the worrying fact, at this stage, that none of the pilot partners have yet a clear plan on how LLM could be sustained after the end of the project in their respective countries. Of course this is to be further elaborated on the next months of the project together with establishing a price strategy according each country market.

For the exploitation of LLM, ideally, one European Company should be enough. However, National differences can be especially identified when it comes to financing new, innovative products and services. Here the situation becomes even more complex, heterogeneous and non-transparent, as there often are not any clear and established regulations.

The new LLM Company, inheriting the background IPRs of eHome and of the BrainFitness software used in the cognitive training process, will be the owner / provider / maintainer of the service in all Europe.

(FS): full solution

(ILC)*: Independent Living Component

(CTC)**: Cognitive Training Component

(PTC)***: Physical Training Component

Current vision/knowledge and exploitation expectations of each pilot partner site

Country	Stakeholder type	Public Private	Interested in	Full Market	Market share % % foreseen	Market share in total numbers	Price
			Full solution				
	At Home		Only ILC*				
	Assisted Living		Only CTC**and PTC***				
	Hospital						
AUSTRIA							
	At Home	Private	Full solution	1.450.000	3%	43.500	2.750
	Public Administration Centres	Public					
		Private					
	Elderly Assisted Living Centres	Public	Full solution	869	10%	86	4.000
		Private					
	Insurance Companies (and/or other private stakeholders)	Public					
		Private	Full solution	18	10%	1,8	9.000
	TELCOS	Public	---				
		Private	Full solution	13	33%	4	9.000
CYPRUS							
	At Home	Private	Full solution	101.351	1%	10.135	2.750
	Public Administration Centres	Public	Full solution	34	30%	10	9.000
		Private					

	Elderly Assisted Living Centres	Public	Full solution	3.313	5%	165	4.000
		Private					
	Insurance Companies (and/or other private stakeholders)	Public		9	0%	---	---
		Private					
	TELCOS	Public		13	0%	---	---
		Private					
FRANCE							
	At Home	Private	Full solution	10.625.000	1%	106.250	2.750
	Public Administration Centres						
	Elderly Assisted Living Centres	Public	Full solution	10.440	1%	104	4.000
		Private					
	Day Care Centres	Public	Full solution	3.000	1%	90	4.000
		Private					
	Insurance Companies (and/or other private stakeholders)	Public		---			
		Private	Full solution	205	3%	6	9.000
	TELCOS	Public					
		Private					
GREECE							
	At Home	Private	Only ILC	2.122.000	1%	21.220	
	Public Administration Centres		Full solution	607	3%	18	9.000
	Elderly Assisted Living Centres	Public	Full solution	36	5%	1,8	4.000
		Private	Full solution	92	5%	4,6	4.000
	Insurance Companies (and/or other private stakeholders)	Public	Full solution	1	---	---	
		Private	Full solution	12	5%	0,6	9.000
	TELCOS	Public	-	-	-	-	
		Private	-	-	-	-	
SPAIN							
	At Home	Private	Full solution	7.714.000	0.5%	38.570	2.750
	Public Administration	Public	Full solution	17	10%	1.7	9.000
	Elderly Assisted Living Centres	Public	Full solution	5.000	1%	50	4.000
		Private					
	Day Care Centres	Public	Full solution	2.200	1%	22	4.000
	Insurance Companies (and/or other private stakeholders)	Public	Full solution	---	---	---	---
		Private		50	10%	5	9.000
	TELCOS	Public					
		Private					

6. National profiles towards financial sustainability

6.1 AUSTRIA

6.1.1 National strategies and actions

The social welfare system in Austria is divided into three sectors:

- Social insurance
- Social protection
- Social assistance

Social insurance provides sickness, pension and accident insurance in exchange for mandatory contributions. **Social protection** is provided as coverage for special groups for whom the state has to take direct responsibility, e.g. war victims, and for whom benefits are provided from general taxation. **Social assistance** provides a need-based safety net for individual cases. It is only provided if other benefits are unavailable or inadequate and financed by provinces from taxation. In general the Austrian long-term care system is a combination of benefits in cash and in kind.

Institutional care services
The provinces have taken over responsibility for an appropriate provision of social services. If the provinces do not provide these services themselves, they must ensure that other institutions provide them in appropriate quality. Thus the management and organisation of social services differs between provinces.

Generally, there are four providers of social welfare/long-term care: **Provinces**, **municipalities**, **social organisations** (*Sozialhilfeverbände*) and **social funds** (*Sozialfonds*). In Burgenland and Lower Austria the provinces are the only providers of social services. In the other provinces the provider structure is two- or threefold. Salzburg delegates the provision of social services to municipalities, Upper Austria to social organisations and Vienna to social funds. Carinthia and Styria pass it on to municipalities and social organisations, Tyrol and Vorarlberg to municipalities and social funds.

The main basis for the management and organisation of social services are nine corresponding provincial Social Welfare Acts. These laws do not only cover assistance to secure daily needs and aid in specific situations but also social services. There is no legal entitlement to these services.

Social services are provided by entities under private law. Persons in need of care may be requested to make contributions to the costs of social services but the social aspects have to be taken into consideration in assessing the share to be borne by them. Thus, there is in general some kind of means testing regarding to social services, but the concrete form differs by province.

Home based care
In Austria, home based care is provided mostly by supraregional organizations like Caritas Österreich, Diakonisches Werk Österreich, Österreichisches Hilfswerk, Österreichisches Rotes Kreuz, and Volkshilfe Österreich. In Vorarlberg local *Krankenpflegevereine* and in Tyrol *Gesundheits- und Sozialsprengel* are the main providers of home based care. In addition to that, there are small providers of care who work in the local area. They include among others home care, home nursing care, mobile therapeutic services, meals on wheels, transport service, home cleaning, laundry services and week-end help.

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6.1.2 National Stakeholders Identified

1) Insurance companies:
1.1 Privately owned:

The most important private insurance companies in Austria to be addressed:

UNIQUA
Vienna Insurance Group

Merkur Versicherung
Generali Group

1.2 Publicly owned:

Wiener Gebietskrankenkasse	WGK
Burgenländische Gebietskrankenkasse	BGK
Kaerntner Gebietskrankenkasse	KGK
Niederoesterreichische Gebietskrankenkasse	NGK
Oberoesterreichische Gebietskrankenkasse	OGK
Salzburger Gebietskrankenkasse	SGK
Steiermaerkische Gebietskrankenkasse	StGK
Tiroler Gebietskrankenkasse	TGK
Versicherungsanstalt oeffentlicher Bediensteter	BVA
Sozialversicerungsanstalt der Bauern	
Krankenfürsorgeanstalt der Bediensteten der Stadt Wien	KFA
Sozialverfsicherungsanstalt der gewerblichen Wirtschaft	SVA
Pensionsversicherungsanstalt	PVA

2) Social Service Departments

Federal Ministry for Health
Federal Minstry for Social Affairs
Fonds Soziales Wien
Sozialreferat der NOe. Landesregierung

3) Residential Facilities

Humanitas
Kuratorium Fortuna
Kursana
Laetitia
Noe Heime
Senecura
Wie Daham
Kuratorium der Wiener PEnsionistenwohnhäuser

4) Telecom and Internet Providers

Telekom Austria Group
UPC
Kabelsignal
LIWEST
Tele2
Cablelink
Teleport
T-Systems
T-Mobile
Orange

Hutchinson 3G
Telering

5) Care Taking Organisations:

Austrian Red Cross
Arbeiter Samariter Bund
Caritas
Volkshilfe
Hilfswerk
Diakonie

6) Geriatric Clinics

Sophienspital Wien
Wiener Krankenanstaltenverbund
Vincenz group
Caritas Socialis

7) Organisations addressing directly elderly people

Oesterreichischer Seniorenrat
Pensionistenverband Oesterreich
Seniorenbund
Seniorkom
50plus GmbH Salzburg
coop 50Plus

6.2 Cyprus

6.2.1 National strategies and actions

Cyprus is in the process of formulating a comprehensive National Strategy for Information Society in order to implement the i2010 policy, the main object of which is to utilize the possibilities offered by the ICTs for the achievement of digital convergence. This would contribute to the achievement of the strategic aim of improving competitiveness in all the fields of economic activity.

Top priority will be given to the use of ICTs in upgrading the services provided by the public sector. Confronting the shortcomings in electronic government is of primary importance, as this constitutes the basis for developing other electronic services. It will also contribute to the improvement of the performance by the public sector, thus facilitating the growth of small companies and the improvement of the quality of life of the inhabitants, especially those who are facing accessibility problems.

More specifically, the interventions to be co-financed by the Structural Funds for the period 2007-2013 are in respect of actions focused on the following two priority sectors:

Interventions for strengthening eGovernment will aim at further extending the public services offered through the Internet and improving their safe use, within a general framework of electronic transactions and communication between the companies, the citizens and the services of the central public administration and local authorities;

Extending the supply of electronic health services (eHealth) - The object of the actions to be taken in the field of eHealth is to use the ICTs in upgrading the quality of health services provided on an island-wide scale and improving their performance. In this context, the interlinking of the central hospitals with the health centers in rural areas will be promoted. The necessity for reform in the health sector is mentioned in the National Reform Programme, while the Structural Funds will contribute toward this in the framework of enhancing the use of ICTs in Public Administration.

Cyprus Health system is a mixed one with the private sector having a big share in covering the medical and medicine needs of the population. Health standard of the Cypriot population is quite high and compares favourably with that of other EU member states.

Private health services are financed by the patients themselves or through health funds implemented by various employers for the benefit of their employees or through trade union health schemes, and also by private health insurance. Private health services are almost exclusively situated in big urban centres.

The small size of Cyprus facilitates the access of citizens to health services. In order to ensure access for all the inhabitants, apart from the private health services concentrated in urban centres, the Ministry of Health operates 6 urban hospitals, one for each district, and 24 rural health centres, as well as more than 230 sub-centres in an equal number of rural

communities. In parallel to this, the extension of nursing care at home and the national network of mental health nursing provide support to chronic patients and the elderly

6.2.2 National Stakeholders Identified

The social welfare system in Cyprus is divided into two sectors:

- ☑ **Private social centers**
- ☑ **Public social centers**

Public Social Centers are under the authority of Social Welfare Services Department.
The Social Welfare Services Department is part of the Ministry of Labour and Social Insurance.
The Social Welfare Services aim to safeguard social cohesion and social solidarity; to provide social protection, achieve social inclusion and promote equal opportunities for all citizens in the Republic of Cyprus; to combat poverty and social exclusion and to promote the interests of individuals, families and communities.

In order to achieve the above-mentioned goals the Social Welfare Services:

- Safeguard every individual´s right to a decent standard of living;
- Provide vocational training to public assistance beneficiaries in order to enter/re enter the labour market, thus achieving their social inclusion;
- Provide support to the family unit so family members may effectively perform their role;
- Support families and individuals who are facing social problems;
- Provide protection and care to children and other vulnerable groups of people;
- Sensitize non governmental organizations and local authorities to provide quality social services on the local level;
- Upgrade the Services, provided by State Institutions and foster families to vulnerable groups of people.

Services for the Elderly and the Disabled
The main objective of the service is to provide the necessary supportive services to enable the Elderly and the Disabled to live at home for as long as possible and to promote their social functioning within the family and the community. This objective is supported by the following services:

- Home-care service
- Day-care service
- Residential care service

The government encourages local communities and non governmental organisations to develop supportive services on the local level in order to accommodate the needs of the people of their communities.

Home-Care
Home care Service aims to support vulnerable groups of people in order to enable them to live at home, to develop their personal skills and to support the family unit to accommodate the family´s elderly/disabled members.

Social Welfare Services employ carers who visit people in need of care at their own premises and provide services according to the old/disabled person´s needs. Carers can also be employed by Community Councils or may be self-employed. The salary of the carers of the last two categories is paid by the Public Assistance Fund.

Home Care service, provides personal hygiene, house cleaning, washing of clothes, cooking, payment of bills, shopping, e.t.c.
Home care is provided to people entitled to public assistance benefit or people who can not meet their special needs by their income.
People interested to receive Home Care, may fill in the Public Assistance Application Form and submit it to their District Social Welfare Services Office.

Day-Care
The day-care service offers the elderly and the disabled the opportunity to live at home for as long as possible. People who can not care for themselves can spend their daytime at their local day-care centre where they are offered cooked meals and laundry facilities. Their entertainment and the creative spending of their time, is among the priorities of the day-care centres.

Day care centres that are operated by the Community Welfare Councils are financed by the Scheme of State Funding.

Residential Care
Residential Care is strictly provided to people when their individual needs can not be met on a 24 hour basis by their family or other supportive services.

The Social Welfare Services place people in need of Residential Care in governmental, community or privately owned Residential Homes.

According to the relevant legislation the Social Welfare Services are responsible for the registration and supervision of the privately owned and community Residential Homes for the Elderly and the Disabled.

6.2.3 PPP at Regional and National level

The possibilities to create a PPP initiative at National level are huge. The private and the public sector can be the first partners in the creating of a PPP initiative. Also, other companies such as telecommunications companies or companies that support these centers can be involved.

6.2.4 National Exploitation opportunities

In Cyprus we have in general 34 public care institutions; 11 day care centres for pre-school age children, 7 residential care institutions for older persons and persons with disabilities, 7 residential care institutions for children under the care of the Director of Social Welfare Services and a Shelter for victims of trafficking.

Also, we have 35 private social center in Cyprus. The private centers can be cooperate with the LLM partners to install in the centers the project solutions.

LLM can be installed in these public social centers and in some private social centers, aiming to provide high standards for the elderly people.

Also, potential partners and buyers can be from the telecommunication sector. In Cyprus we have 2 large telecommunications companies, the Cyprus Telecommunication Authority which is a government company and the MTN Company which is a private company.

6.3 France (e-SENIORS)

6.3.1 National strategies and actions

On June 2010, Nora Berra, secrétaire d'Etat chargée des aînés, announced the starting of the implementation of the French project “Vivre chez soi” (Living at Home). Launched in February, this mission aims at fostering life at home for the elderly. Economically speaking, keeping the elderly in their homes would cut the “dependency bill” by about 25%.

More than 60% of people aged over 80 live in their homes today. In 2009, France had 14,4 millions of people aged 60 years and over (22,6 %) and should have about 22,3 millions in 2050 (32% of the population). Limiting elderly loss of autonomy is a public health stake.

The "Vivre chez soi" project is organised around six priority “flaps” proposing 18 measures along three axes:

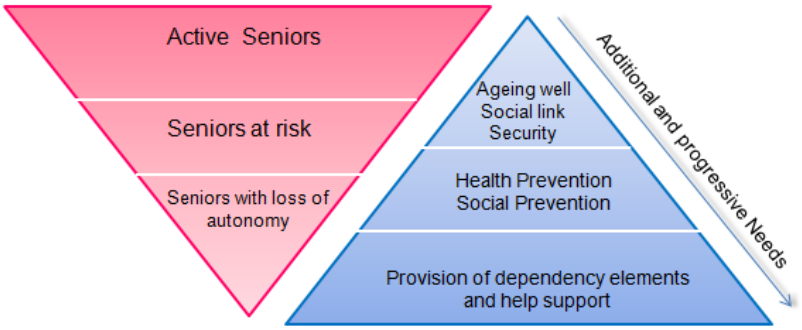
Improving the ambient living conditions of the seniors and elderly, if they Express the wish to stay home. Home remains a very risky place (isolation, domestic accidents, crooks, etc.). The role of prevention at home will be determinant for easing life at home”.

"Being able to go out, moving around freely, reaching shops, services, and leisure activities are essential factors” according to Jean-Pierre Aquino, the president of the French society of Geriatric and Gerontology.

The goal is to work on the discriminations, notably for the insurances (indirect exclusions by the level of bonuses), the mutual, that can drive to the exclusion of some categories of populations.

The French Plan deserves special attention to the technologies and services improving the Living at home. Indeed, in a context of economic restriction there is not to miss the remedies of some ICTs solutions that can contribute to increase the capacity of the aged person and/or at least alleviate their dependency from others. The reduction, at least relative, of people resources (helping professional or domestic) is foreseeable considering the considerable growth of the needs make especially sharp the recourse necessary to this tools.
The technologies and services for the autonomy constitute a blooming sector and an economic driver.

Among the 12 and 13 million that make up elders population in France 10% are APA beneficiaries, this is they are considered dependent people, more than a half undergo or underwent long length problems thus they will see their autonomy will decrease with the progressive loss of autonomy new need will appear and come to be added to the initial needs. With some pathologies new needs will appear that will not make disappear previous ones. The following diagram illustrates the interrelationship between growth of the needs and population targets. A sustainable economic model to answer to these new exigencies is needed.



Alain Franco - Vivre Chez soi - Rapport à Mme Nora Berra, Secrétaire d'État en charge des Aînés - Juin 2010

As regards LLM, perhaps, the most interesting aspect concerns accessing new Technologies: A communications campaign and a portal dedicated to the elderly will be launched within this plan.

In order to GENERALISE access to the Internet, the Secretary of State to the Elderly, "recommends that operators define a preferential tariff 'connection for seniors' aiming at 10 euros monthly ". Research should be conducted to make products more accessible according to the "design for all" concepts. In order to develop communicating objects, an investment fund will be created, dedicated to companies innovating in that field.

It also proposes "mutualising" the tools for the remote processing of all stakeholders in the chain of services to the person (home care help associations, institutions, private

providers, etc), while unifying them as much as possible. It also foresees to bring closer geographically the Call Centres of the services to elders and to encourage their development while uniting in some cases the services of emergencies, social care and medical monitoring…

These are just plans and not yet government green light has been given so far.

In France, there are several other cognitive training products at present on the market. To name but a few, they are: Happy Neuron, Mind Fit, Brain Training, Brain Workout, Nintendo's programme (for DS or Wii 'consoles'), etc. Yet, getting to know their respective market share with a fair degree of accuracy and reliability is very difficult at this point in time.

LLM's one of its unique selling proposition is the capacity to combine cognitive training and physical training, both covered by the Independent Living Component, an e-Home kind of system which allows for an automated surveillance of isolated elderly users. All three functionalities would come in a coordinated "one-stop-shop" approach. Therefore, to our knowledge, there is no directly comparable system/product so far on the market. Today, achieving an LLM offer, as such (ie PTC+CTC+ILC+ services), requires assembling two or three different systems, not connected together, for example:

1. A fully configured Wii plus a non-intrusive e-Home device (2-system-not connected, not coordinated)
2. A cognitive training game/product plus some kind of physical training device (recumbent bike, etc) and a non-intrusive e-Home device (3-system-not connected, not coordinated)

As far as cognitive training games/products are concerned, a special mention should be made for Gradior, which unlike many other products is currently used in a therapeutic context, as –it seems- Brain Fitness is sometimes in Germany.

This field is of course widely investigated in France and Europe at the present time, and in a move to boost "profitable R&D", the French Government is fostering a "High Tech ICT programme" of which several subprogrammes cover "Games for health" and "ICTs for ageing well". In these series new approaches are being developed. Yet it is too early at this stage to decide whether, and how, they may directly compete with LLM.

6.3.2 National Stakeholders Identified:

As France is concerned, the public instances that can help the elderly are the so called "collectivités locales (local collectivities)", Régions, Départements, Villes (cities via their social services) and a national actor, the Caisse Nationale de Solidarité pour l'Autonomie (CNSA), already mentioned in D5.1.

The social security system, today in great deep financial disarray, will only partially refund medical devices "stricto sensu", ie a system (or product) able to deliver proven medical results (service medical ratify). Informal discussions with health professionals and AFSSAPS (Agence Francaise de Securite Sanitaire des Produits de Sante), the French

sanitary safety agency, have yielded to the conclusion that LLM is not a medical device "stricto sensu".

Thus we have to turn for stakeholders to the private sphere, as large private nursing home chains, or the retirement branches of some of the complementary pension funds, wishing to do one (or all) of the following:

- Providing some entertainment and leisure supposed to keep their boarders fitter (and thus easier to manage),
- Supplementing human surveillance by using e-Home like devices (thus cutting, perhaps, on the cost of [specialised] personnel),
- Projecting an attractive, dynamic, modern and trendy image of their offer to the general public (thus lowering, perhaps, the image deficit of nursing homes).

In any case it is a fact that the market development department of large private nursing home organisations in France are re-thinking their approach to ageing and to their potential "customer" base.

The administrative health system in France: List of possible national stakeholders in terms of local health and social care public authorities (administrative).

ANS (Agence Nationale de Santé) is the National Health Agency created by the government. ANS has regional "representations", Agences Régionales de Santé, (acronym ARS): in every region, which report to the Préfet de Région, the regional National representative.

The ANS links local departments and the institutions responsible for public health and the health care set up in the regions:

- DRASS: pôle santé Direction régionale des affaires sanitaires et sociales;
- DDASS: Pôle santé Direction départementales des affaires sanitaires et sociales;
- ARH: Agence régionale de l'hospitalisation;
- URCAM: Union régionale des caisses d'assurance maladie;
- GRSP: Groupement régional de santé publique;
- CRAM: partie santé de la Caisse régionale d'Assurance maladie;
- DRSM: partie santé de la Direction régional du service;
- MSA: partie santé de la Mutualité sociale agricole;
- RSI: partie santé du Régime social des indépendants.

Every ARS local department is in charge of implementing the local policy for the supply of health care, the socio-medical sector and public health.

Financial help for home day cares and home helpers is administered by the Conseils généraux, a council at the "department" level, an administrative subdivision.

Some Financial help is administered by the Caisses d'Allocation Familiales (family support services). The idea behind the ARS institution is to reduce territorial healthcare divides, to ensure better access to health care, to improve healthcare delivery flows and to improve the quality of healthcare to cost ratio, supposedly improving the population's health and making the healthcare system more efficient.

From the medical side, several French organisations and institutes are responsible for the national health care system. One important institution is the National Institute of Health and Medical Research (Institut national de la santé et de la recherche médicale – Inserm), INSERM, which is in charge of undertaking or fostering the medical research that is needed, it does have a public health department.

The French Agency of Health Safety of Health Products, (Agence Française de Sécurité Sanitaire des Produits des Santé – AFSSAPS) was created by the law of 1 July 1998 and set up in 1999. Its aim is to strengthen existing monitoring and health safety systems, in order to provide and improve response to the increasing diversity and interaction of health safety issues relating to health care products. Its mission is to guarantee the independence, the scientific competency and the study of administrative efficiency, research on therapeutic properties, usage of medicines and on health related products like cosmetic products, tattooing products, etc. The agency participates in the application of laws and rules to the different commercial processes of health and cosmetic related processes.

INVS: Institut de veille sanitaire, is a public service in charge of monitoring continuously the population's health condition.

6.4 Greece

6.4.1 National strategies and actions

The government has embrace the program Greece "Digital Strategy 2006-2013" fundamental aim is to use information technologies for achieving higher productivity in the economy and for improving citizens' quality of life, so as to materialize a Digital leap. The essential difference compared to previous practices is that the new strategy is not centred on specific projects per organisation but on prescriptions of services to be offered. There is an open admission that the country has not been able to follow other Member States in taking full advantage of Information Technologies. Six are the basic orientations of the strategy – four of them focus on productivity and two on the quality of life:

- Promotion of ICT in enterprises;
- Supply of digital services to enterprises and restructuring of the public sector;
- Strengthening of the ICT sector;
- Promotion of entrepreneurship in ICT related activities;
- Improvement of daily life through ICT; and
- Design of digital services for the citizen.

The common denominator for all of the above is fast broadband Internet connectivity

The programme has a strong regional character, as major part of the described actions and interventions concerns all of the 13 regions of Greece.

6.4.2 National stakeholders

Greek National stakeholders in terms of local health and social care public authorities have been already identified and analysed in details at Deliverable D5.1. In summary Greek national stakeholders of LLM service, are:

Elderly social and health care public authorities:

- The Open Care Centres for the Elderly (KAPI)
- Home Care for the Elderly
- DAY CARE Centres for Older people (KIFI)
- Residential Care Homes

Public local health care public authorities:

- The Ministry of Health and Welfare (MHW)
- The Ministry of Labour and Social Security
- Hospitals

Private Elderly care provision systems:

- Residential Care Homes
- Insurance Companies
- Private Health Insurance and Private Medical care in Greece

6.4.3 PPP at Regional and National level

In Greece, **the Special Secretariat for PPPs** was set up in the Ministry of Economy and Finance along with the ratification of Law 3389/2005. This Unit follows the structure and role of equivalent units in other Member States of the European Union for the promotion and implementation of PPPs. The mission of the Special Secretariat is the provision of support and assistance to the Inter-Ministerial PPP Committee and to public entities, while its main tasks involve the following:

- the identification of the works or services which might be constructed or provided through Partnerships and be included under the provisions of Law 3389/2005,
- the evaluation of the proposals submitted by public entities and their subsequent forwarding to the Inter-Ministerial PPP Committee for approval,
- the promotion in general of the construction of works or the provision of services through the Partnership framework,
- the facilitation and support of Public Entities in pursuing contract award procedures, as defined in Law 3389/2005, for the selection of Private Entities,
- the monitoring of the implementation of Partnership Contracts.

The main **responsibilities** of the Special Secretariat for PPPs involve the following:

- the coordination of PPP projects that are promoted or planned by Public Entities, by seeking data related with them,
- the evaluation of projects that may be implemented via a PPP scheme according to the provisions of Law 3389/2005, by elaborating data or information gathered from any Public or Private entity,
- the elaboration of the information it receives from professional and business entities or associations, including the Greek Banking Association, the Technical Chamber of Greece, the Economic Chamber of Greece, and the Association of Contracting Companies,
- the study of comprehensive proposals elaborated by Public or Private Entities for the construction of works or the supply of services,
- the monitoring of all financial obligations undertaken by Public Entities, and especially of the future burden upon the Public Investment Programme that may or will result from the payments to be made to Partnerships subject to the provisions of this law,
- the diffusion of expertise to all relevant stakeholders, by preparing and distributing printed material with information and instructions related to

Partnerships, the purposes they serve, the internationally accepted methods of establishing such Partnerships and the provisions of this law,

- the standardization of documents, which can be used for the needs of the Contract Award Procedures,
- the standardization of all kinds of Partnership Contracts or Ancillary Agreements, in order to assist Public and Private Entities in formulating the terms and conditions of their Partnership Contracts,
- the submission to the Joint Ministers' PPP Committe of proposals intended to improve the legislative framework regulating the Partnerships,
- the coordination of the preparation of studies and the supply of auxiliary services in general to persons recruited pursuant to the provisions of Law 3389/2005.

Pursuant the above responsibilities, the Special Secretariat for PPPs collects the information necessary to decide which projects or services can be implemented through Partnerships, and evaluates the financial and technical parameters, as well as the associated legal and other issues. The Special Secretariat then proceeds to draw up a non-binding list of projects and services ("List of Proposed Partnerships") that may be implemented through Partnerships and may be included to the provisions of Law 3389/2005.

Example of an existed project:

Project Title	Utilization of the Municipal estate via the implementation of a Welfare Centre for the Elderly for the Municipality of Mikra.
Sector	Municipal PPP Projects
Contracting Authority	Municipality of Mikra
Project Details	The scope of the project involves the design, financing, construction, maintenance, facility management, insurance and exploitation of a Welfare Centre for the Elderly amongst the area of Trilofo and Kardia of Mikra Municipality and the implementation of sports and cultural facilities. The duration of the Partnership is thirty (30) years. Contracting Authority of this project is the Municipality of Mikra. The implementation of the Partnership aims to exploit the Municipal estate via the development of sports and cultural infrastructure in favor of the Municipality's citizens towards the direction of an integrated restoration and a qualitative enhancement and exploitation of the wider area. The indicative estimated budget (NPV) of the project amounts to 126 million euros and will be fully repaid. Moreover, the partnership agreement will provide for a minimum guaranteed revenue on behalf of the Private Partner for the Municipality of Chios and, in case the turnover from the operation of the Unit exceeds a certain level, the additional profit will be shared between the public and the Private Partner.
Location(s):	Municipality of Mikra
Date of approval by the IM PPP Committee	01 Sep 2008
Status of the project	Preparation of the tender documents for the selection of Advisors

Transaction Status	The Contracting Authority is currently preparing the tender documents for the selection of advisors.
Indicative Budget	126 million euros
Project Duration	30 years
Construction Period	2 year
Operation Period	28 years

6.4.4 National Exploitation opportunities

In order to reach out to the potential customers in Greece, AUTH will jointly work with the Greek partners Tero, ATHENARC and NKUA but also with the potential stakeholders identified to develop marketing relationships and communication that will serve the purpose of increasing awareness on LLM application for the e-inclusion sector and for the development of a partnership model for funding.

Especially the following networks will be utilized in Greece:

- Potential Business Investors:
  - VCI (Velti Center of Innovation) (http://www.vci.gr)
  - THERMI A.E. (http://www.thermokoitida.gr)
  - I4G Euroconsultants S.A. (http://www.i4g.gr)
  - IBG MANAGEMENT (http://www.marfingroup.gr)
  - Global Finance (http://www.globalfinance.gr)
  - TAMEIO ANAPTIKSIS NEAS OIKONOMIAS (http://www.taneo.gr)

- The Regional/National ICT and Innovation Programmes:
  - The NSRF (National Strategic Reference Framework) 2007–2013 constitutes the programming of European Union Funds at national level for the 2007–2013 periods. It was elaborated within the framework of the new strategic approach to the Cohesion Policy of the European Union, according to which NSRF "…ensures that the assistance from the Funds is consistent with the Community strategic guidelines on cohesion and identifies the link between Community priorities, on the one hand, and the national reform programme, on the other."

6.5 INTRAS (Spain)

6.5.1 National strategies and actions

The Act 39/2006, of 14th December, on the Promotion of Personal Autonomy and Care for dependent people, *Ley de Promoción de la Autonomía Personal y Atención a las Personas en Situación de Dependencia* (LAPAD) configures a new citizenship right, known as the "fourth pillar of the welfare system". The Act establishes the universal nature of the benefits and the entitlement to access them under equal conditions, for all elderly or disabled people that need help in carrying out the basic activities of daily living (SAAD, Sistema para la Autonomía y Atención a la Dependencia). These principles can be considered the philosophy of the long term care system in Spain, whose main goals are the guaranty of the basic welfare conditions and the prediction of the protection levels for disabled people.

The SAAD is based on the respect for the constitutional framework of powers established by statute and is also based on collaboration, cooperation and participation of the different Public Administrations involved. *The Territorial Council of the System for Autonomy and Care for Dependency* created with the collaboration of the General State Administration and the Autonomous Communities, has as main functions to agree the framework of inter-administrative cooperation, the intensity of the catalog services, conditions and amount of financial benefits, the criteria for participation of beneficiaries in the cost of the services and to determine the scale for recognizing the situation of dependency. *The SAAD Advisory Committee* informs is a consultative body, within the SAAD. It advises and makes proposals on matters that are of particular interest to system operations. To ensure the participation of organizations representing people in a situation of dependency and their families, there are three additional advisory bodies: *The State Council of Senior Citizens, The National Disability Council and The State Council of Non Governmental Social Action.*

So far, provision of health care services to people in a dependent situation had traditionally been a family responsibility, whereas administration had limited itself only to provide LTC services when family income were insufficient to provide such a care. Changes in family patterns, the higher rate of female labour market participation, and the emerging needs that all of this entails, have encouraged the development of the current long term care system.

It is expected that more than one million people will benefit from the services of long-term care (LTC) arising from the development and application of the law of dependence in Spain, a country where most of these services are provided by family, in other words, a country where LTC is mainly provided as an informal care service (70%). Moreover, it is estimated that the implementation of the Act will create 300,000 new jobs in the context of care to elders.

The **Autonomous Communities** have taken on the responsibility regarding the provision of benefits and services established by the Dependency Law, within the framework of the so called Network of Social Services of the Autonomous Communities. These responsibilities include not only the provision of services to dependent people, but also the provision of certain benefits.
The Service Catalogue includes the following social services to promote personal autonomy and dependency care:

- Prevention services of dependence and the promotion of personal autonomy.
- Personal Alert System
- Home help service (Addressing the needs of the household)
- Personal care
- Adult day-care centres
- Residential Care Service

When the competent administrations are unable to offer these services, the dependent person shall be entitled to receive financial benefits. There exist three types of financial benefits: **financial assistance to access certain care services**, **financial assistance for informal caregivers**, **financial assistance to hire personal care givers**. The amount of these aids is conditional on the degree of dependency and the economic situation of each individual.

Institutional Long-Term Care. Dependent persons Living in Institutions

	65 to 79 Years	Older tan 80
Residential Homes	50847	157355
Homes for disabled if 65+	3689	716
Nursing Homes	4991	4923
Total, Institutional care services	**59527**	**162994**

Source: Encuesta de Discapacidad, Autonomía Personal y situaciones de Dependencia, 2008

Home Care

Home help service is made up of a set of initiatives that are carried out in the home of the dependent person in order to cater for his/her everyday needs, provided by entities or companies that have been accredited for this function: services related to attending to domestic or home needs (cleaning, washing, cooking or others) and services related to personal care.
More than seven million people received home care services in Spain in 2008, what amounts to 9.4 % of the population older than 65 years. 52.2 % of them were attended by SAD (Home care Service) and the others by the tele-care service. The average person that receive home care services is a woman (67%), aged 79 (51% are older than 80), living with somebody else (only 31% live alone)14.

Region	Population older Than 65	Users Atended	Coverage Ratio
Andalucía	1196354	46924	3.92
Aragón	262113	11316	4.32

Asturias	235428	10712	4.55
Baleares	145675	4738	3.25
Canarias	263027	9251	3.52
Cantabria	107342	3826	3.56
Castilla y León	570559	27624	4.84
Castilla-La Mancha	362087	28111	7.76
Cataluña*	1196294	57034	4.77
C.Valenciana	813214	22305	2.74
Extremadura	207081	20506	9.90
Galicia	602986	10018	1.66
Madrid	895583	71343	7.97
Murcia	194003	4699	2.42
Navarra	107020	3660	3.42
País Vasco	401688	21891	5.45
La Rioja	57187	3001	5.25
Ceuta	8640	828	9.58
Melilla	7526	291	3.87
ESPAÑA	**7633807**	**358078**	**4.69**

(1) Coverage ratio: (users served/population older than 65)*100 – Imserso 2008

Semi-institutional care

The Day or Night Centre service offers comprehensive care during the day or night to the dependent person, with the objective of improving or maintaining the highest possible level of personal autonomy and supporting the families or carers. In particular, from a bio-psycho-social perspective, it covers the needs of counselling, prevention, rehabilitation, guidance for the promotion of autonomy, enablement or assistance and personal care. There were around 63,500 vacancies in public (39%), semi-public (25%) and private Day or Night centres (36%) during 2008.

There exists Day Centres for persons under the age of 65 years, Day Centres for older persons, Day Centres that are specialised due to the specific nature of the care they provide, and Night Centres, which are adapted to the peculiarities and ages of the dependent persons. Regarding vacancies in day care centers they have tripled: 14,925 new places were provided each year during the period 2002-2008.

An additional formal care service that is beyond the previously analyzed is the accommodation of older people in residential apartments, in Protective Houses and under foster care. Almost all Autonomous Communities have Protective Housing. In January 2008 there were 850 Protective's homes supervised a total of 7285 seats, the which 78% are on the Communities Castilla-La Mancha (1,504), Catalonia (2,065), Galicia (943) and the Basque Country (1,167). Only five autonomous communities provide residential apartments services and only six provide foster care services. Galicia ranks first in both.

6.5.2 National stakeholders

General State Administrations

17 Autonomous Communities: Andalucía, Aragón, Asturias, Baleares (Balearic Islands), Ceuta[3], Canarias (Canary Islands), Cantabria, Castilla-La Mancha, Castilla y León, Cataluyna (Catalonia), Comunidad Valenciana (Valencian Community), Extremadura, Galicia, La Rioja, Madrid, Melilla[4], Murcia, Navarra, País Vasco (Basque Country)

6.5.3 PPP at Regional and National level

As in other European Union countries, Spanish local governments, by law and according to their population size, provide a number of basic services, which include the local police service, fire-fighting, refuse collection, street cleaning, land use control, urban transportation, social services, leisure and cultural activities, public works and town planning, slaughterhouses, central markets, housing, etc. Only the larger Spanish municipalities participate in the delivery of services such as education or health, which are under regional government responsibility. The vast majority of Spanish municipalities are very small. Recently, some Autonomous Communities have been establishing supra-municipal or district authorities (Comarcas), grouping several municipalities in order to manage the delivery of common local services.

Public-private partnership initiatives were introduced into Spain by the Municipal Services Act of 1955, which allows the provision of local services by private operators. This act was updated by the Public Contracting Act of 1995, which was recently amended to bring it into line with EU legislation. Spanish local governments have traditionally provided services using almost all PPP methods, such as local government corporations, concessions or franchises, lease of assets with or without additional investment, public-private ventures, associations with other local governments, public entities and non-profit organisations.

Thus in Spain public-private partnerships are already a formula known and that in the case of LLM could be used, however there is to take into account that dealing with public authorities imply on part of the providers to be ready to assume all the initiatives, what adds an extra load of work for providers and constant political pressures (delays,

[3] the autonomous cities of Ceuta and Melilla plus three small islands of Islas Chafarinas, Peñón de Alhucemas, and Peñón de Vélez de la Gomera, administered directly by the Spanish central government, are all along the coast of Morocco and are collectively referred to as Places of Sovereignty (Plazas de Soberanía

[4] the autonomous cities of Ceuta and Melilla plus three small islands of Islas Chafarinas, Peñón de Alhucemas, and Peñón de Vélez de la Gomera, administered directly by the Spanish central government, are all along the coast of Morocco and are collectively referred to as Places of Sovereignty (Plazas de Soberanía

changing of priorities, changes of persons, killed initiatives, ….), that should not be underestimated.

6.5.4 National Exploitation opportunities

According to Intras vision, first **commercialization** of LLM **differs** from other costumer oriented products, due to the fact that it is addressed to maintain and improve the health and well being of the elderly people and therefore the purchasing decision will often lie in the domain of the social care & social-health professionals.

This means that an effective commercialization and distribution strategy should be mainly **focused on professionals** in order to have a greater access to primary and secondary final user (respectively, elderly people and informal care-givers).

Of course it is not to forget the importance of targeting also the representatives of health and social care organizations and the caretakers. Taken into account this assumptions and following INTRAS' experience of 15 years in the market of cognitive assessment, in the national market training and intervention solutions, the Long Lasting Memories service should approach the following models of market audiences, classified in three categories. These categories consider two dimensions: the degree of difficulty in reaching the concerned market segment and the expectancies and opportunities of selling the product.

1) Mixed Model:
Private and non profit making entities that provide social and health care and assistance to elderly people as customers: these organizations could be interested in hiring/ purchasing the LLM services and equipment, but the final user usually will have to contribute with an amount. This is the case of Private Hospitals, Day Care Centres, Residential Facilities, non-profit making organizations (associations, federations, foundations for the disabled and elderly people, etc.), even gyms. The number of these organizations is increasing in Europe due to an ever growing demand and constitutes a vast market but the marketing efforts could be costly due to the fact that the effective sales would probably be individual and fragmentary. In this sense, fostering a strategy based on identifying networks could be effective to reach a more massive demand.

2) Model of Public Funding:

Public entities, as hospitals (Memory clinics, Geriatric units, Psychiatric departments, etc.) or social care centres purchase the services for the community. Thus, final users reach the services freely. This model is more difficult to reach, implies a higher degree of deployment of the service and certain evidences that demonstrate that it produces the envisaged benefits and results. On the other hand, it presents an important advantage which is a higher expectancy in the units to hire/sale due to a supposedly greater and widespread use of the product.

3) Model of End-Users, as customers:

Elderly people and/or their carers pay the whole price of the service. This model seems not to be very feasible in Spain in the short and in the medium term, due to the low utilization and knowledge of new technologies on the part of the elderly people and their reduced purchasing power (average pension: 877,12 €). Reimbursement schemes of these products are not yet established in Spain. Directly targeting to their caregivers could be within this model an interesting way to approach the elderly people

Whatever the model is chosen, from the standpoint of the final end user (the elderly individual), the modularity concept of LLM solution will have to consider the different profiles or needs of this population, depending on the health conditions, presence/absence of cognitive deterioration, disabilities, motivations and interests, etc. Roughly speaking, 3 audience segments can be distinguished:

Segment	Characteristics
1. Active Retirees (60-70)	May have technology experience in their careers or are still young enough and receptive to easily learn. Unless they have a chronic condition, assistive technology is not important
2. Seniors (70-80)	Most likely have never used technology are intimidated and reluctant to use it; still have friends and some sort of social circle; slowing down; and their attitude towards technology is 'this is not for me'!
3. Elders 80+	Technology is a foreign concept, social circle has diminished quickly and ability to tend to oneself is very low

7. Financial opportunities for Sustainability

Here there is a summary overview on research programmes financed by the different Consortium member nations during the last years. These research programmes combine tasks related to the field of AAL respectively "ICT enabled independent living for elderly". They are often not dedicated only to this specific subject but are also related to broader questions (the research programmes referred to here do not exceed the status quo of March 2008 as well.

7.1 Sustainability opportunity per pilot country

7.1.1 Austria

The Federal Chancellery of Austria co-ordinates horizontal information concerning social issues of ICT. It has an advisory board which developed an action plan in 2005 called "eAustria 2010". There are thematic RTD Programmes (e.g. FIT-IT69) as well as structure RTD Programmes (e.g. K+70). The BMVIT is the main actor for ICT activities in Austria, one of the thematic programmes contributing to AAL is FIT-IT with 11.5 million Euro funding in 2005. The Federal Ministry for Health and Woman (BMGF) is active as well, e.g. in health telematics.

There are several research institutions dealing with AAL related problems, e.g. the University for Technology of Vienna with its Institute "integrated study" division "fortec" and different units of the ARCS. Main topics are usability, human computer interfaces, rehabilitation, assistive communication devices, sensory aids, and sensors for social alarms, smart home technology, robotics and much more. Another example is the University of Linz with its Institute "integrated study". The institute focuses on special HCI and software development, research and development in Human Computer Interfaces for persons with functional restrictions (visually, hearing and multiple impaired people), creating innovative HCI by controlling information via PDA or mobile phone, studying the consequences of technology for disabled and old persons, usability testing.

7.1.2 Cyprus

The Research Promotion Foundation (RPF), founded in 1996, was established at the initiative of the Government of the Republic of Cyprus, to promote the development of scientific and technological research in Cyprus due to the fundamental importance of research in contemporary societies. Therefore by default, RPF reflects the national research strategy.

The University of Cyprus, namely the Department of Computer Science, is deeply involved in several activities with regard to tele-medicine solutions or services for impaired people, while the Cyprus Neuroscience & Technology Institute is working on projects with regard to Ubiquitous Computing for elderly. The Centre for Leisure, Tourism and Sport Research and Development Intercollege is also partner in the

Thematic Network THENAPA II: "Ageing and disability - a new crossing between physical activity, social inclusion and life-long wellbeing".

7.1.3 Greece

In Greece research and development is highly funded by the EU-R&D framework and supplemented by the responsible state departments. Several pilot projects mainly in the field of health and care are currently running in the scope of the EU framework programme.

The initiative "Digital Local Authority" was launched with a total budget of 60 m Euro. Its objective is to develop digital services at the municipal and regional level, across all Greece.

Such digital services are intended to facilitate the interaction of citizens with local authorities by utilizing the power of IT and the Internet.

A project for the provision of eHealth home-based rehabilitation, follow up and home hospitalisation services in patients with advanced stages of chronic diseases was performed by the eHealth Unit of Sotiria Hospital, Athens.

The main research institutions involved in the development of ICT for elderly and disabled are the Centre for Universal Access and Assistive Technologies of the Institute of Computer Science, Foundation for Research and Technology – Hellas (ICSFORTH), the Department of Informatics and Telecommunications of the University of Athens, the Department of Product & Systems Design Engineering of the University of the Aegean, the Department of Computer Engineering and Informatics of the University of Patras, the Institute of Language and Speech Processing – ILSP and the National Centre for Social Research (EKKE), which created the Greek Social Data Bank (GSDB), to support and promote social empirical research in Greece and disseminate results.

7.1.4 Germany

On the political side the main stakeholders are the Federal Ministry of Education and Research (BMBF) and the Federal Ministry of Economics and Technology (BMWi). ICT research is a domain in which both ministries have a leading position. The Fraunhofer research institutions have formed a "Fraunhofer alliance" of six institutes under the heading "Ambient Assisted Living".

In the mid of the year 2007 the German Federal Ministry of Education and Research (BMBF) published a call for proposals for "technology and services for the demographic change". In 2008 the BMBF launched a call directly addressing AAL topics.

Other highly visible research projects in the tele-medicine area are funded by the BMWi programme Next Generation Media of the BMWi.

Germany is a main player within the Ambient Assisted Living joint programme. The core of the German participation within the Ambient Assisted Living joint programme stems from the technology research programme "Microsystems Technologies", also run under

authority of the BMBF where collaborative industry-research projects mostly follow a technological approach, e.g. for a range of new medicine technology applications.

Besides a vast number of university institutes underway in research activities, the Generation Research Programme (GRP), carried out by the Luwig-Maximilians-University in Munich, is concerned with fundamental research which concern all ages, the application of knowledge from the field of medicine, and the conception of innovative technologies.

7.1.5 France

Several French organisations and institutes are responsible for the national health care system. One important institution is the National Institute of Health and Medical Research (Institut national de la santé et de la recherche médicale – Inserm), which monitors the public health.

The French Agency of Health Safety of Health Products, (Agence Française de Sécurité Sanitaire des Produits des Santé – AFSSAPS) was created by the law of 1 July 1998 and set up in 1999. Its aim is to strengthen existing monitoring and health safety systems, in order to provide and improve response to the increasing diversity and interaction of health safety issues relating to health care products. Its mission is to guarantee the independence, the scientific competency and the study of administrative efficiency, research on therapeutic properties, usage of medicines and on health related products like cosmetic products, tattooing products, etc. The agency participates in the application of laws and rules to the different commercial processes of health and cosmetic related processes.

7.1.6 Spain

Spanish research policy is mainly situated in three ministries: the Ministry of Science and Technology, the Ministry of Education and Science, which plays an important role in designing the national R&D&I-plan, and the Ministry of Industry, Tourism and Trade, which is involved in R&D policies oriented towards the production sector.

The Spanish participation in the AAL Initiative is being managed by two Spanish programme owners, the Instituto de Salud Carlos III (affiliated to the Ministry of Health and Consumption) and the Dirección General para el Desarrollo de la Sociedad de la Información (affiliated to the Ministry of Industry, Tourism and Trade).

The Institute of Health Carlos III is a national public research and scientific support organisation founded as an autonomous body under the Ministry of Health and Consumption. It is responsible for the promotion of biomedical and health science research designated to develop and provide high quality scientific-technical services to the National Health care System and to the Spanish society in general. In 1994 the Healthcare Technology Evaluation Agency was created as a part of the Carlos III Healthcare Institute in order "to meet the consulting needs of the National Healthcare

System for defining its Healthcare Policies in the major line of socially advanced Healthcare Systems".

"The Dirección General para el Desarrollo de la Sociedad de la Información (DGDSI) is the Directorate-General of the Ministry of Industry, Tourism and Trade (MITYC) legally responsible for promoting the business R&D in the field of Information and Communication Technologies (ICT), and specifically in the area of e-inclusion and e-care.

The CDTI programme and I³ Programme address health oriented tasks in parallel with several other technologies.

Within the Programme to Encourage Technical Research (PROFIT now AVANZA) so-called "Tractor" projects are financed. These projects focus on themes and research disciplines as well as on services for the Information society like e-contents, e-inclusion and e-assistance. Resulting Strategic Actions aim at integrating ICT solutions directed to disadvantaged groups with specific needs like elderly people, people with disabilities, immigrants, patients, etc.

7.2 Sustainability good practices in the independent living domain

Good practice examples addressing market barriers in the "independent living domain" that are being successfully must be addressed in order to exploit project outcomes. The following good practices have been picked-up from the publication "ICT & Ageing – European Study on Users, Markets and Technologies" and are really worth a look at, for those that as us, are thinking of going into the market with a ppp formula.

NOTE: most of the programmes/figures (and cases) are dated before the economic debacle, thus samples should be taken very carefully as they could not be longer applied under current situation.

TAUNUS BKK Disease Management Programme: (telemedicine)

TAUNUS BKK, a German public health insurer, has mainstreamed home telehealth solutions within dedicated disease management programmes addressing patients suffering from diabetes or heart insufficiency, many of which are older people. This was enabled through regulatory changes adopted in the context of a national health care reform.

National Framework Agreement on Telecare (NFA): (Telecare – NHS in charge –now transferred to third parties through procurement procedures)

The National Framework Agreement on Telecare (NFA) was developed as a public procurement mechanism to support the delivery of telecare policy in the UK. It eliminates the need for local care services to individually undertake their own procurement exercises and more generally aims to contribute to the creation of a competitive market place for

telecare for the public sector. This award winning initiative has been rated as very successful, being used by over 80% of local authorities and delivering substantial cost savings.

FASS Tele-assistance: (Regional Government. A lot of money behind and many projects (National/European) where they get money from. In some cases they have created some private companies for running the services.

In Spain, the Fundación Andaluza de Servicios Sociales (FASS) has mainstreamed basic telecare in the framework of its legal duty to provide care in the community under the ambit of social legislation enacted at the national policy level. The latter makes explicit reference to tele-assistance as a mean of supporting vulnerable people in living independently in the community.

The West Lothian Home Safety Service: The West Lothian authority has launched an innovative programme reshaping existing community services for older people, whereby the introduction of telecare has acted as a catalyst of organisational and cultural change. Further service innovation is currently being explored in the framework of the national Scottish Telecare Strategy.

The SOPHIA Telecare Service: (from 21 to 50 €/month, depending on the service there is a price per installation plus a monthly fee price). Please, German speaking partners to confirm (the web is only in German)

SOPHIA is a fully up and running service offering that has become available in certain parts of Germany since 2004. The service provides social support to older people living in their own home environment, including the management of age-related risks. The service concept which has developed from a publicly funded pilot project has been successfully mainstreamed by means of an innovative franchise model primarily addressing housing organisations.

The Dutch Domotics Programme: (Dutch Ministry – for Healthcare institutions)

The Dutch Ministry of Health, Care and Welfare provides subsidies for the mainstreaming of independent living technology in the serviced housing sector. Following the funding of a variety of smart home / telecare technology pilots, public funds have been channelled into the serviced housing domain, with a view to incentive mainstream deployment of a broad range of relevant technologies.

Telecare Business Case Planning Model: (National government programme for Local Authorities Social departments)

The Telecare Learning & Improvement Network in the UK has developed a business case modelling tool to support social service departments in the development of strategy and

business cases for the mainstreaming of telecare. The immediate aim was to support councils in making decisions about how to spend public funds available from a national government programme in an economically sustainable manner.

"Vivago Watch" – A European Success Story: Vivago Oy is a Finnish healthcare technology company that develops, sells and markets automatic personal security systems. All their strategy is based in the product they developed: The Vivago Watch is part of a commercially available telecare product range developed by a Finnish company (Vivago Oy, formerly IST) that is now being used in a number of European countries. It represents a significant innovation on traditional social alarm products and is said to be the world's first security device that automatically monitors a person's well-being 24 hours a day. The product has received many innovation awards in Finland and internationally. It shows that success in the market requires good understanding and cooperation with health and social services that comprise the core target markets, and that it can take time to break into these markets.

Pillar of Rural Excellence "Domotique et Santé": A regional approach addressing social and economic needs. The initiative "Pôle Domotique et Santé de Guéret" is an example of a regional approach aiming to capitalise on the opportunities that innovations in domotic services could present for meeting both social and economic needs in the area. A core issue for the region was to tackle the demographic challenge of a low density, rural and ageing population. The domotics project was set up to improve the quality of life of inhabitants, to promote the implementation of domotic services and business that create new jobs and to trigger the growth of a new market for innovative technologies.

Résidences "Maisons Vill'Âge": Smart Retirement Villages (medical association offering ICTs services, among them dwelling units: new communitarian houses powered with telecommunication infrastructure for the monitoring of the residents)

The Résidences "Maisons Vill'Âge" project is an example of an initiative that aims to provide older people with a complete, purpose-built community that incorporates domotic and telehealth services from its inception. The project was set up to meet the needs of an ageing population and to support independent living for older people aged between 65 and 85 who have some form of disability. The initiative offers activity monitoring, vital signs monitoring and access to a range of entertainment and communication facilities via a dedicated TV interface.

The TRIL Centre: Technology Research for Independent Living

The Irish Industrial Development Authority (IDA) and the Intel Corporation jointly invested €20 million into the TRIL Centre over a period of three years to collaborate with several leading Irish universities in creating one of the largest research efforts of this kind in the world.

The Centre functions as a co-ordinated collection of research projects addressing the physical, cognitive and social consequences of ageing, all informed by ethnographic research supported by a shared pool of knowledge and engineering resources. It is a collaborative effort combining Intel personnel and researchers from Irish universities and hospitals in multi-disciplinary teams. The mission of the TRIL Centre is to discover and deliver technology solutions which support independent living.

The TRIL Centre in Ireland is an interesting example of a public-private collaboration established with the aim to discover and deliver technology solutions to support independent living for older people. The Centre focuses on three key areas: improving health and social engagement for older people, detecting and preventing falls in the home, and helping those with memory loss to maintain their independence.

Non Piu' Soli. Mainstreamed combination of social alarm and telehealth services

Non Piu' Soli is a combined social alarm and telehealth service that has been mainstreamed in the Municipality of Rome since 2002. It is an example of ICT-supported services being integrated with existing public social services. The service is operated in partnership by FARMACAP, the public agency that manages the municipal pharmacies of Rome, and the Municipality of Rome.

FOLD Housing Association: Housing-with-care and telehealthcare

(a national supported project: Virtex is a partnership between Tunstall, Fold Housing Association, Housing 21, DigiTV and the University of Sheffield which will deliver an innovative research project to develop a Virtual Extra Care Service (VIRTEx) within local communities. Of course, Tunstall is behind putting all their devices.

This is an example of mainstreaming of telecare and telehealth being driven by a not-for-profit housing association, as part of its overall emphasis on service improvement and innovation. Telecare was launched by Fold in Northern Ireland in 1993, and telehealth was launched as a mainstream service in 2007. The case also illustrates the importance of ensuring buy-in from existing health and social services in order to successfully mainstream ICT-based services.

The E-Care Project: A coordinated regional approach

(creation of a company: Cup 2000 initiative of the Health Ministry and local authorities of Bologna – medical services. Very lucrative according to the figures they give)

E-Care provides an example of an initiative operating on a regional basis that aims to connect various actors – public, voluntary and private – to deliver co-ordinated ICT-supported health and social care services to older people. The project integrates activities between the different service providers at regional and municipal levels and will ultimately integrate telecare and telehealth projects that are currently at pilot stage.

Gwynedd Telecare: Mainstreaming from a local initiative

(one of the many –similar- initiatives we can find across UK. They are promoted by local councils themselves –and usually Tunstall is behind if not in all, in many of them)

The Gwynedd Telecare service developed from a small local pilot project that allowed localisation of the telecare technology to suit the community (i.e. the provision of Welsh-speaking home units). There has been rapid growth in demand for packages, mainly due to 'word of mouth' and local council publicity. Telecare has since been rolled-out at county and regional levels in North Wales.

Just Checking: Supporting Independent Living for people with Dementia

(telecare applied to dementia - Leeds Partnership NHS Foundation Trust)

'Just Checking' is a telecare system that monitors daily life activities of people with dementia in their own homes and presents the information in a meaningful format to professional or informal carers via a secure web site. The system is commercially available and has been installed by a number of social care services and other care providers in the UK. Evaluation studies have demonstrated that the system can enable people with dementia to live independently at home for longer.

The National Telecare Development Programme, Joint Improvement Team

The National Telecare Development Programme is a government-sponsored policy and practice initiative that aims to support independent living for older people and people with a disability by promoting the use of telecare in Scotland. It is a good example of a government-driven programme to expand and mainstream telecare services, accompanied by a comprehensive policy, learning and development strategy. The Programme has also benefited from thorough independent evaluation, with input from health and social care partnerships across Scotland.

PAL4- Personal Assistant 4 Life: Cooperate on infrastructure, compete on services

PAL4 (Personal Assistant for Life) is a non-profit organisation running an open platform that enables provision of a variety of supportive services into older peoples' homes. Organisations providing social care, health care and/or other forms of support to older people in the community can utilise a common technology platform for developing and providing services according to their own branding and layout. Currently, over 30 organisations have joined PAL4 with a view to pursuing service innovation according to a joint motto: cooperate on infrastructure, compete on services.

Preventative Technology Grant: A centrally-funded grant to kick-start mainstream telecare services

The Preventative Technology Grant is a focused and centrally-funded policy measure directed towards pump priming of telecare services in the UK. Overall, £80 million (105 million €) were made available by the national government over the period 2006-2008. Councils were expected to invest in telecare services, to help an additional 160,000 older people to live at home safely and securely and reduce the number of avoidable admissions to residential/nursing care and hospital. Various models are now emerging as organisations consider the best use of the grant and other resources for telecare and telehealth. At one end, organisations are cautiously using the funding to run small scale pilots. At the other end, there appears to be a phased mainstreaming of telecare as a long term health, housing and social care operation.

Healthcare centres Dr. Hein: Integrating telerehabilitation into established on-site therapy concepts

The Dr.Hein group operates a chain of health care centres providing occupational and speech therapy services with help of a patented e-health system (EvoCare). Also, a dedicated dementia prevention appliance was developed. The health care centres are staffed with interdisciplinary teams addressing different target populations such as older people, patients with chronic disease and children. Four centres are now in operation across the country, and further centres are planned to be set up in the near future.

Whole System Demonstrator (WSD) Programme: Improving the evidence base on telecare and telehealth impacts

The Whole System Demonstrator (WSD) programme was launched in May 2008. It is funded by the UK Department of Health with the aim to find out how technology can help people managing their own health and maintaining their independence. A further aim is to evaluate the benefits potentially yielded by integrated care service delivery with help of advanced technologies in a randomised control trial environment. The WSD programme is conducted at three sites – Cornwall, Kent and Newham. By means of a robust evaluation programme, the initiative is expected to significantly improve the current evidence base on impacts yielded by the implementation of telecare and telehealth solutions under real world conditions.

HyvinvointiTV®: A learning environment for client-driven service development

The CaringTV (HyvinvointiTV®) concept was developed by a consortium comprising public institutions, municipalities and commercial parties. In technological regard the concept relies on an interactive TV system utilising a safe broadband connection for delivering supportive services into the homes of older people. The system has been developed in the framework of a national programme (Finn Well / InnoElli Senior) directed towards developing supportive solutions for older people living at home and for municipalities facing challenges providing health and social services to them. CaringTV® provides also a "learning environment" for variouse sub-projects seeking to develop supportive services according to a client-driven methodological approach.

ACTION: Strengthening self-management capabilities of older people & informal carers

The ACTION service is directed towards frail older persons who prefer to stay in their own homes but who are in need of support. The service includes remote provision of dedicated information and training programmes in order to strengthen the self-management capabilities of older people and their families, thus enabling them to better cope with their situation. By means of ICT, family carers can get on-demand support from local service centres that are staffed with qualified professionals. Also, networking and mutual exchange between service users is facilitated. The service is available in several municipalities.

FinnWell: Interlinking industrial and welfare objectives

FinnWell is a five-year (2004-2009) technology programme of the National Technology Agency of Finland, Tekes. Its objective is to improve the quality and profitability of healthcare, and to promote business activities and export in the field. Three main themes are addressed by the programme: development of technologies for diagnostics and care; development of IT products and systems that support care, follow-up or prevention of illnesses; development of the operational processes of healthcare. Independent living and home care services for older people are one area that was supported, amongst many others. The overall value of the programme was more than 170 million euro, of which Tekes invested about half and the participants in the programme fund the other half.

German Society for Gerontechnology- GGT: A competence centre addressing the seniors market

The GGT German Society for Gerontechnology (GGT Deutsche Gesellschaft für Gerontotechnik®) has been set up with a view to advancing the market for so called geronotechology. Amongst variouse other product categories, this includes ICT-based products and services. A particular aim is to empower small and medium sized enterprises to produce, merchandize, install and maintain products that are of particular relevance to the seniors market. Another focus of the association's work is on general awareness rising addressing the demand side. Variouse services are offered to industry partners, service provider organizations as well as older consumers and their families. GGT has set up a dedicated certification scheme for senior-friendly products and services.

The InnoELLI SENIOR Programme: Facilitating ICT-enabled process innovation in the field of elderly care (InnoELLI Senior project)

The InnoELLI Senior Programme (2006 – 2008) was set up with a view to developing integrated service models that enable public, private and third-sector organisations to adopt new working methods and provide technology-enabled (in particular, IT-enabled) cost-effective services in the field of elderly care. Particular emphasis was given to the mainstreaming potential of innovative care practices beyond local pilot settings. The

programme was expected to contribute to the building up of a regional "elderly care services" cluster, thereby interlinking both industrial and welfare objectives.

The PWT Foundation – Investments in Public Welfare Technology (ABT-fonden): ICT enabled streamlining of public service delivery

The Danish government has allocated 3 billion DKK (about 400 million Euros) to a dedicated programme (2009 to 2015) directed towards developing and improving public sector services through the implementation of labour-saving technologies and more efficient working processes. In particular, the programme is intended to enable public services to meet increasing demand with fewer human resources, a challenge that is expected to take effect over the coming years as ongoing demographic developments will accelerate further. The programme spans across all public sector activities, and a range of projects are currently funded across different thematic areas including "Telecommunications Solutions and Information and Communication Technology (ICT)", "Robotics and Automation", "Digitalisation" and "CareTechnology.

Smart Living in Hattingen: ICT deployment in the mainstream housing sector

Due to strategic considerations connected with the accelerating trend towards population ageing, Hattinger Housing Association (Hattinger Wohnungsgenossenschaft – hwg eG), a mainstream housing provider based in Germany, entered into a cooperation with two institutes of the Fraunhofer Association, a leading German RTD organisation, in order to develop and implement mature smart home technology into its existing housing stock. Pursuing a strictly demand-driven approach, the "smart living" platform was installed in about 60 flats. Customisation of the standard system according to individual needs turned out to be challenging because of economic and managerial obstacles.

bonacasa®: Under the umbrella of its brand 'bonacasa®', Bracher and Partner AG specialises in consultancy services and project development in the area of senior citizen housing. The company offers a range of customer-tailored services to municipalities and private investors, ranging from the generation of project ideas up to full project implementation. Implementation of a networked home infrastructure – the so called bonacasa® net – constitutes a central element of the bonacasa® concept. It enables on-demand access to interpersonal communication services, personal security appliances and entertainment services.

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