



October 2008

Overview of ongoing Projects FP6 – FP7 – CIP

January 2008 – December 2009

AALiance

**European Ambient Assisted
Living Innovation Alliance**

www.aaliance.eu

up to 1.070 M€ EC funding (FP7)

Ambient Assisted Living (AAL) solutions, based on advanced ICT are developed for better ageing conditions at work, home and in the society. In order to improve the value chain of AAL solutions, this **coordination action** will provide a framework for stakeholders to define research and development priorities, timeframes and action plans in the field of AAL. It aims to play a key role in ensuring an adequate focus of research funding, fostering effective public-private partnerships and developing a European research policy.

September 2008 – August 2011

Accessible

**Accessibility Assessment
Simulation Environment for
New Applications Design and
Development**

www.accessible-project.eu

up to 2.600 M€ EC funding (FP7)

Introducing a harmonised accessibility methodology into the software design and development processes used by large organisations, SMEs or individuals (developers, designers, etc), with measurement strategies and methodologies would help improving the accessibility of future ICT applications and systems for all user groups. This **research project** will develop a process for collating different methodological tools, and checking coherence with W3C/WAI ARIA and other standards, in order to produce an Open Source Assessment Simulation Environment (including accessibility-analysing and developer-aid tools) to assess efficiently the accessibility and viability of software applications. This will be demonstrated for: Mobile applications (including JavaFX Scripts), Web applications, Web services (mainly for info-mobility services), and description languages (e.g. UML, SDL, etc.).



September 2008 – February 2012

AEGIS

**Open Accessibility
Everywhere: Groundwork,
Infrastructure, Standards**

www.aegis-project.eu

up to 8.220 M€ EC funding (FP7)

3rd generation access techniques should provide a more exploitable and deeply embeddable approach to accessibility in mainstream ICT. This **integrating project** develops and explores this approach with an Open Accessibility Framework addressing the design, development and deployment of accessible mainstream ICT. Providing embedded and built-in solutions, as well as toolkits for developers, for “engraving” accessibility in existing and emerging mass-market products, will make accessibility open, plug & play, personalised & configurable, realistic & applicable. The project identifies user needs and interaction models for several user groups, (end users with visual, hearing, motion, speech and cognitive impairments as well as application developers) and develops support for desktop applications, rich web applications and embedded generalized accessibility in user interfaces and applications running into standard as well as rich features cell phones and PDAs. This will be tested with hundreds of end users, developers and experts.

September 2006 – August 2009

Agent-Dysl

**Accommodative intelligent
educational environments for
dyslexic learners**

www.agent-dysl.eu

up to 2.000 M€ EC funding (FP6)

Dyslexia is a common learning disorder, where the main areas of difficulty are in reading, writing, spelling, numeracy, personal organisation and time-keeping. This **research project** is developing an Intelligent Assistive Reading System to help dyslexic children to improve their reading, by providing them with personalised help and reading material. The personalisation is based on individual profiles that are created by observing each child reading a text. Using image analysis, the system can assess emotional and physical state and adapt the document presentation accordingly. This would be incorporated into school settings as an “accommodative learning environment” taking into account the learning process context.

January 2007 – March 2009

Aladin

**Ambient Lighting Assistance
for an Ageing Population**

www.ambient-lighting.eu

up to 1.800 M€ EC funding (FP6)

Adaptive lighting can contribute to sound sleep and a regular sleep-wake cycle. This **research project** will investigate the impact of lighting to the wellbeing and comfort of older people, by developing an assistive system. Its intelligent open-loop control and biofeedback will adapt light parameters in response to psycho-physiological data, while manual adjustments and default values stay available. An application will help users in understanding their own affective/cognitive state and trying to regulate it. With its open architecture, the system could be easily extended to include other environmental factors such as temperature, acoustics or colour.

January 2007 – December 2008

ASK-IT

**Ambient Intelligence System
of Agents for Knowledge-
based and Integrated
Services for Mobility
Impaired users**

www.ask-it.org

up to 8.500 M€ EC funding (FP6)

This **integrated project** is developing services to allow mobility impaired users to travel more independently, via Ambient Intelligence (Aml) in semantic web enabled services. The users can also be provided with real-time access to services and information on work related and leisure matters. The services are provided through a mobile phone or a PDA. The emphasis of the project is in a seamless service provision and in a device interface that can address personal needs and preferences. For example, information for a visually impaired person can be given orally, while an illiterate person can receive the information in graphics. The demonstration phase will evaluate the system in eight cities across Europe.



September 2008 – August 2011

BRAIN

BCI's with Rapid Automated Interfaces for Nonexperts

www.brain-project.eu

up to 2.700 M€ EC funding (FP6)

This **research project** will push Brain Computer Interfaces (BCI) into practical assistive and ICT tools to enhance inclusion for a range of different disabled users, by allowing them to interact with loved ones, carers, home appliances and assistive devices, or personal computer and internet technologies. Improvement of reliability, flexibility, usability, and accessibility will entail upgrades to all four components of a BCI system - signal acquisition, operating protocol, signal translation, and application. Lightweight, inexpensive, non-invasive / easy to use sensors will be developed. Software will identify the best parameters for each user and provide training. Automated signal processing will improve signal translation. An intuitive universal interface will enable control of existing applications, including home assistive technologies.

November 2008 – October 2010

Bridge IT

Thematic Network ICT for social integration and cultural diversity

www.

up to 0.484 M€ EC funding
(Deployment CIP)

Increasing migrations into the EU raise the question of the potential of ICTs for promoting the integration of immigrants and cultural diversity in Europe. As pioneer initiatives in this field have already taken place locally, this **thematic network** will identify good practices and prepare tools for their replication and co-deployment in Europe, focussing on: ICT for early education and life long learning in a multicultural Europe, ICT for immigrant's jobs and their participation to the economy, ICT for empowerment of civil society and social capital. Resulting tools will include thematic guidelines targeting relevant stakeholders for deployment or duplication of initiatives, national scenarios on how to proceed at national/regional level, recommendations and projects ideas.

January 2008 – December 2009

Capsil

International Support of a Common Awareness and Knowledge Platform for Studying and Enabling Independent Living

www.capsil.org

up to 0.540 M€ EC funding (FP7)

To help the elderly people remain independent for a longer time many ICT solutions are being developed within the EU, USA, and Japan. However, they tend to be fragmented and heterogeneous. This **coordinating action** is teaming an international coalition of university and industrial partners developing hardware, software and knowledge solutions to independent living. There are also members of regional and national centres on aging engaged in the process of helping to establish public policy and international standards. The aim is to launch initiatives, disseminated by a series of workshops in the EU, USA and Japan. It will develop a detailed roadmap for EU research. It is proposed to incorporate all the solutions into Wiki entries. This will support policy makers to coordinate research agendas and funding efforts across the three continents.

September 2004 – August 2009

Cogain

Communication by Gaze Interaction

www.cogain.org/

up to 2.900 M€ EC funding (FP6)

This **network of excellence** is organising European research in eye-tracking integration using computers, by establishing a sustainable network for sharing training resources and standards among the various laboratories, enabling researchers to develop new technologies and systems more efficiently. The researchers are improving existing gaze-based interaction techniques and reducing costs via modular design, and are pushing forward the implementation of such technologies for everyday communication, for mobility, and for environmental control.



September 2006 – August 2009

CogKnow

Helping people with mild dementia navigate their day

www.cogknow.eu

up to 1.900 M€ EC funding (FP6)

While there is some research and development in cognitive prosthetics, there are very few relevant tools or technologies to help people with mild dementia to navigate through their day. The objective of this **research project** is to research and prototype such a portable, near-to-market, user-validated device and associated services. The solution will offer the users information and reassurance in a discreet manner entailing cognitive reinforcement, in order to help people to remember, maintain social contact, perform daily life activities and enhance their feelings of safety.

September 2008 – August 2010

COMEIN

Online Mobile Communities to facilitate the social Inclusion of young marginalised people

www

up to 1.820 M€ EC funding (FP7)

Young people are assets to development and potential agents of social change, yet youth exclusion is widespread and increasing across Europe. Through the concept of online communities, ICT has the potential to serve as a gateway to social inclusion (increased knowledge, capabilities, networking and skills). This exploratory **research project** will utilise mobile networks and telephones used by marginalised youth, as the main infrastructure. Using innovative real-time integrated communication video solutions, a networked media platform will be developed to give rise to mobile online communities, delivering interactive media content specifically aimed at marginalised youth. The impact of its use by marginalised youth will be analysed and recommendations made for future research

January 2008 – December 2010

CompanionAble

Integrated Cognitive Assistive & Domatic Companion Robotic Systems for Ability & Security

companionable.net

up to 7.800 M€ EC funding (FP7)

To address the issues of social inclusion and homecare of people who suffer from chronic cognitive disabilities, this **integrated project** will develop the synergy of robotics and ambient intelligence technologies and enhance the cognitive stimulation and therapy management of the care-recipient. This integrating project will produce a robotic companion (mobile facilitation) working collaboratively with a smart home environment (stationary facilitation). The framework architecture will provide a scalable and cost-effective integration. Evaluation will take place in a number of test-beds representing the diverse European user-base.

February 2008 – January 2011

Confidence

Ubiquitous Care System to Support Independent Living

www.confidence-eu.org

up to 3.500 M€ EC funding (FP7)

In order to detect an unusual event (such as a fall) or any unexpected behaviour that could indicate health problems with elderly people, this **research project** will develop and integrate existing innovative technologies in a new care system. This will work both outdoors and indoors and the user can control it and customise its alarm protocol. Such a cost effective, non-intrusive and reliable system would support the independence and confidence of elderly people and diminish the need of their institutionalisation. This multidisciplinary research with end-users involved at various stages will result in a working prototype.



July 2004 – June 2009

CWST

Conferences, Workshops, Seminars and Tutorials to Support eInclusion

cwst.icchp.org

up to 0.445 M€ EC funding (FP6)

This **support action** specifically arranges a series of scientific conferences, workshops, seminars, tutorials and meetings in order to support the objectives of e-Inclusion. The promotion of e-Inclusion will be done in parallel to e-Accessibility and Design for All initiatives. This will contribute to the success of e-Inclusion projects and activities by providing opportunities for publication and dissemination. It will also provide information on the state of the art and future developments to support the strategic planning of e-Inclusion.

January 2007 – December 2009

Dfa@eInclusion

Design for all for eInclusion

www.dfaei.org

up to 1.650 M€ EC funding (FP6)

To design mainstream products and services to be accessible by as broad a range of users as possible, including older people and people with disabilities, is the definition for "Design for All". This **coordination action** contributes towards e-Inclusion through fostering Design for All. It extends and enhances previous efforts targeted to the creation of a sound theoretical framework for universal design of ICT.

September 2006 – August 2009

Diadem

Delivering Inclusive Access for Disabled or Elderly Members of the community

www.project-diadem.eu

up to 1.950 M€ EC funding (FP6)

In order to support users who suffer from a reduction in their cognitive skills to remain active and independent in the society both at work and at home, this **research project** aims at providing an adaptable web browser interface. The system, located in the user's PC, will ensure that as many services on the Internet as possible are accessible and it will also monitor that the user's privacy and security are not challenged. A plug-in to a web browser monitors the ability of the user to interact, while dynamic personalisation of the interface optimises the assistance to a specific user. The service provider needs only to use standard web services and to provide some fixed meta-level data about the dialogue structure. The technology will also be extended into the work place.

May 2008 – April 2011

Dreaming

EIDeRly-friEndly Alarm handling and MonitorING

www.

up to 2.770 M€ EC funding
(Deployment CIP)

This **industry-driven pilot** intends to validate new, economically sustainable home assistance and eInclusion services able to extend the independent living of elderly citizens in their homes and break their loneliness. The system includes health and safety monitoring and assistance at home, through privacy respecting and user-friendly technology (sensors, TV based videoconferencing). Alarm and alerts are handled through a Decision Support System, which selects the most suitable action and possibly dispatch the appropriate resources (fire brigade, ambulance, GP on duty, nurse, social worker, etc.). Validation covers the impact on the quality of life of elders, their formal and informal caregivers and their relatives, on economic and clinical indicators, on financial sustainability. This will help refining the business case in view of large-scale deployment.



July 2008 – December 2011

DTV4ALL

Digital Television for All

[www.](#)

up to 1.462 M€ EC funding
(Deployment CIP)

This **industry-driven pilot** encompasses: mature access services (subtitling, signing and audio description); identification, analysis, tests, and recommendations for emerging services, devices and platforms for widespread and sustainable second-generation digital television; user requirements elicitation and testing; standardisation and dissemination. In addition to implementing the mature services for the large-scale pilot sites, “proof of concept” activities will be carried out around emerging services, which are not yet available “off-the-shelf” but will approach maturity on platforms by 2010.

September 2006 – August 2008

eAbilities

A virtual platform to enhance and organise the coordination among centres for accessibility resources and support

www.eabilities-eu.org

up to 0.750 M€ EC funding (FP6)

This **support action** will develop a framework for current and future actions in research, education and technology transfer in the field of ICT accessibility at home, in vehicles and in the working environment. This includes mapping the recent technological developments in ICT accessibility, organising contacts and exchanges and identifying needs, breakthroughs and bottlenecks in the field. This requires tracing research and development, transfer of technology, education and training based on the cooperation between industry, academia, government institutions and research centres. The information will be spread to the target groups via a new space for resource and knowledge sharing.

January 2007 – June 2009

EasyLine+

Low cost advanced white goods for a longer independent life of elderly people

www.arenque-ks.com/easynet

up to 1.450 M€ EC funding (FP6)

Elderly people can be compensated in their loss of physical and/or cognitive abilities when they are using an advanced white good (as a refrigerator or an oven) in the home. This **research project** will develop near to market prototypes of white goods that can be actuated in the home by the elderly people themselves or via an assisting “e-servant” control system based on sensors information and the habits of the user. As an example, such an advanced refrigerator will be able to read the RFID label of products and the home system will then tell to the user if some food is missing or going out of date and which food the user can choose to eat taking into consideration his or her dietary requirements.

September 2006 – August 2009

ElderGames

Development of high therapeutic value IST-based games for monitoring and improving the quality of life of Elderly People

www.eldergames.eu

up to 0.950 M€ EC funding (FP6)

For improving the cognitive skills and the quality of life for elderly people this **research project** will deliver a preventive, therapeutic tool via an interactive-play board. It will be the first play platform being able to monitor cognitive health and wellbeing, allowing an early detection of cognitive diseases or social unease and responding to these signals. The project will develop IST-based games using advanced visualisation and interaction interfaces in order to improve quality of life in the old age, with a particular emphasis on cognitive skills.



January 2007 – December 2009

Enable

A wearable system supporting services to enable elderly people to live well, independently and at ease

www.enable-project.eu

up to 2.800 M€ EC funding (FP6)

Mitigation of the effects of disability and increased quality of life: independence, autonomy, mobility, communications, care and safety is the aim of this **research project**, which will develop a personal, user-centred enabling system for use by an elderly person in or out of the home. A number of services, such as emergency and health monitoring, will be provided. The system combines GSM technologies and a portable bracelet and is based on a distributed open platform, enabling other services to be added by third parties by “plugging” into defined interfaces. The mobile phone enables the user to go out whilst maintaining access to help and services.

February 2008 January 2010

ePal

Extending Professional Active Life

www.epal.eu.com

up to 0.800 M€ EC funding (FP7)

Many elderly citizens, following retirement, face a risk of becoming marginalised and considered as a cost burden rather than a resource in the society. It is a challenge to create an ICT-supported environment where elderly citizens do not feel excluded, and where they have the chance to use their knowledge and expertise in making valued contributions to the communities where they live. This **coordination action** aims at establishing a research roadmap towards a second generation support system for active ageing. Such system is foreseen as an answer to the challenges of the increased life expectancy and the ageing of the European population.

October 2006 – September 2008

eSangathan

Collaborative Working Environment for Ageing Workforce

www.esangathan.eu

up to 0.750 M€ EC funding (FP6)

In Europe, old age often means being excluded from the labour market. Yet in India, the expert retirees are considered a "national treasure" (Sangathan) due to their valuable experience. However, these elderly experts often lack the technological tools to support their work. This **support action** will experiment how the elderly could benefit from using collaborative tools. Exchanging experiences with India will help foster and improve competitiveness in Europe and improve the quality of life for the Indian ageing workforce with innovative ICT practices.

October 2006 – September 2010

EU4All

European Unified Approach for Accessible Lifelong Learning

www.eu4all-project.eu

up to 7.400 M€ EC funding (FP6)

In a knowledge based economy, the lifelong learning paradigm recognises that education and work are integrated throughout people's lives. Technology plays an increasing role in mediating this. However, if this technology is inappropriate and introduced with insufficient support, disabled people will face even further exclusion from education and work opportunities. This **integrated project** seeks to impact the way universities and educational institutions deliver lifelong learning services to the whole population. Support services and a open service technical infrastructure will enable teaching, technical and administrative staff to offer their teaching and services in a way that is accessible to disabled learners.



June 2008- May 2011

HANDS

Helping Autism diagnosed young people Navigate and Develop Socially

[www.](#)

up to 2.580 M€ EC funding (FP7)

This research project aims to develop a mobile ICT solution to help teenagers with an autism diagnosis (ASD) to become better integrated in society. A toolset based on new research from Human-Computer Interaction (HCI) will be developed to support them in handling situations where they have to act autonomously, as well as to develop their social skills and self management skills. In addition to knowledge from Cognitive Psychology and Pedagogical research, the emerging Persuasive Technology will be used as a key component and will be validated, with its special advantages related to motivation, which are critical for autism-diagnosed individuals.

June 2008- May 2011

HaptiMap

Haptic, audio and Visual Interfaces fro Maps and Location-Based Services

www.haptimap.org

up to 6.670 M€ EC funding (FP7)

This **integrating project** will deeply embed accessibility into digital mainstream maps and mobile location-based services, by developing tools that make it easier for developers to add adaptable multimodal components (designed to improve accessibility) and by raising awareness via new guidelines and extensions to existing practices so that accessibility issues are considered throughout the design process. An open, interoperable and standardized adaptable toolkit together with a set of design guidelines will help developers of mainstream applications make maps in general more accessible and easier to use (not only for disabled users but for everyone). Several new applications will be developed with the use of the toolkit and guidelines and evaluated in multiple real life scenarios.

September 2004 – February 2009

HearCom

Hearing in the Communication Society

www.hearcom.org

up to 7.500 M€ EC funding (FP6)

The current society is strongly communication-oriented. As much of it focuses on sound and speech, many people experience severe limitations in their activities, caused either by hearing loss or by poor environmental conditions, and other groups like elderly, young children, and second-language users are made also vulnerable. Via a cross-boundary approach this **integrated project** aims at reducing these limitations in auditory communication by mobilizing and integrating European expertise in audiology, acoustics, speech technology and ICT. This will also support the improvement of eServices. The results will be disseminated in the form of models, software tools and demonstrations in the Internet.

January 2008 - December 2010

Hermes

Cognitive Care and Guidance for Active Ageing

www.fp7-hermes.eu

up to 2.820 M€ EC funding (FP7)

Age-related decline of cognitive capabilities can be compensated by using other functional cognitive skills and training these, thereby reducing the need for active care and support and increasing the ability to cope with everyday life and live independently. This **research project** provides an integrated approach to cognitive care through an assistive technology combined with the functional skills of an older person. Based on intelligent audio and visual processing and reasoning, the project will result in the combination of a home-based and mobile device to support the user's cognitive state and prevent cognitive decline.



October 2006 – October 2008

ICT for ALL

The social impacts of ICT and their limited reach to potentially- excluded communities. Measuring the problem and undertaking initiatives for its effective mitigation

www.ictforall.info

up to 0.300 M€ EC funding (FP7)

ICT embedded in a rapidly expanding set of devices, of all scales and potential uses and facilitated by state of the art communication protocols (broadband, 3G, etc) is reshaping contemporary life and unleashing an amazing, even to comprehend, potential. However, this has not really resulted to the same level of change in the everyday life of the EU citizens. The target communities of this **support action**, namely immigrants (including internal migration), disabled, unemployed, and ageing, have yet to be fully reached by the welcome effects of these, very often barrier removing, technologies. A framework (monitoring indicators) will measure the interaction of these communities with ICT and in particular with the more revolutionary ones, broadband Internet, 3G, digital TV and ambient intelligence.

September 2008 - August 2010

INCLUSO

Social software for inclusion of (marginalised) young people

www.incluso.org

up to 0.970 M€ EC funding (FP7)

This exploratory **research project** aims to verify that social software tools can facilitate social inclusion of marginalized young people, based on desk research, expert input, pilots, and the development of a measurement tool to screen evolution in social inclusion/exclusion and of a business and sustainability model for organizations working with ICT in the area of social inclusion. The four pilots, focussing on complementary groups, will be initiated in strong, existing organizations already working with marginalized youngsters. Social software will be introduced as an empowering tool for the participating organizations. Pilot feedback will strengthen the business and sustainability models and the measurement tool will help drawing suggestions for future research.

September 2006 – August 2009

I2Home

Intuitive interaction for everyone with home appliances based on industry standards

www.i2home.org

up to 2.700 M€ EC funding (FP6)

The design and implementation of appliances, mobile phones and remote controls are often made to serve users that are already familiar with modern technologies. As a result, many people with cognitive disabilities and older persons are excluded from being able to use them. This **research project** will build upon a new series of industry standards (ANSI/INCITS 389ff) for interfacing networked appliances by means of a Universal Remote Console and it will use an architecture with a Universal Control Hub that communicates to networked (off-the-shelf) home appliances and consumer electronics devices (through industry networking protocols) and provides intelligent and adaptable interfaces particularly targeted to persons with cognitive disabilities and older persons.

January 2008 – February 2010

MARE

Market requirements, barriers and cost-benefit aspects of assistive technologies

www.mareproject.eu

up to 0.467 M€ EC funding (FP7)

This **support action** aims at a technology and foresight analysis in the field of Assistive Technologies (AT), with an analysis of their state of development, the identification of the barriers to their full development, and a technology foresight to understand their future developments in Europe. This will be achieved through refining definitions, identifying market stakeholders and missing players, analysing results from relevant research projects, analysing market maturity, trends and convergence paths, but also cross analysis of User requirements versus market structures and regulation frameworks. A specific tailored Technology Foresight Model and a web repository and dissemination will be developed.



September 2006 - August 2010

MonAmi

Mainstreaming Ambient Intelligence

www.monami.info

up to 8.700 M€ EC funding (FP6)

This **integrated project** will demonstrate that accessible, useful services for elderly and disabled persons living at home can be delivered in mainstream systems and platforms. Bouquets of services and applications will be selected and developed, with a Design for All approach together with potential users, in the areas of comfort applications, health, safety and security as well as communication and information. The technology platforms will be derived from standard technology mainly built upon the TFIHI approach and will include reliable self-organizing networks, wearable devices, monitoring and service infrastructures ensuring the quality of service, reliability and privacy. Feasibility and usability testing and validation will be carried out in six countries.

October 2006 - March 2009

MPower

Middleware platform for empowering cognitive disabled and elderly

www.sintef.no/mpower

up to 2.350 M€ EC funding (FP6)

This **research project** will define and implement an open platform to simplify and speed up the task of developing and deploying services for persons with cognitive disabilities and the elderly. The platform will support the integration of SMART HOUSE, interoperability between profession and institution specific systems (as a hospital information system) and secure and safe information management. Applications will be developed to demonstrate the feasibility of the platform in relation to (i) a dynamic sharing of plans and information and (ii) interconnectivity and integration of smart home and sensor technologies.

January 2008 – December 2011

Oasis

Open Architecture for Accessible Services Integration and Standardisation

www.oasis-project.eu

up to 8.520 M€ EC funding (FP7)

The aim of this **integrating project** is to develop the interoperability, quality, breadth and usability of services of all daily activities for the elderly. In order to enable and facilitate interoperability, seamless connectivity and the sharing of content between such services and related ontologies, the project will develop an open reference architecture and system. The applications developed include a nutritional advisor, an activity coach, a brain and skills trainer, social communities' platform, health monitoring as well as environmental control. Applications are all integrated as a unified, dynamic service batch, managed by a Service Centre and it supports all types of mobile devices and all types of environments for the elderly and beyond.

January 2007 - June 2010

Persona

Perceptive Spaces Promoting Independent Ageing

www.aal-persona.org

up to 6.750 M€ EC funding (FP6)

There is a need to harmonise Ambient Assisted Living (AAL) technologies and the development of sustainable and affordable solutions for social inclusion and independent living of elderly people. This **integrated project** aims to integrate these approaches into a common semantic framework, advancing the concept of Ambient Intelligence. It will develop a technological platform based on scalability and openness providing a broad range of AAL services. Psychologically pleasant and easy-to-use integrated solutions will demonstrate affordability and sustainability of the approach for all the actors and stakeholders involved. Social impact will be assessed and a business strategy for future deployment of the proposed technologies and services will be initiated.



July 2008 – June 2010

Replay

Gaming technology platform for social reintegration of marginalised youth

www.replayproject.eu

up to 0.915 M€ EC funding (FP7)

This **research project** aims at providing young offenders, with a learning environment to facilitate their reintegration. Using interactive gaming technology would motivate them to become aware of how and why they behave the way they do and encourage them to take greater responsibility in their decisions and behaviour. The distributed platform and simulator will allow them to interact, share ideas, and cooperate, in order to improve their communication skills, mutual accountability and ability to work in teams. They will learn by doing and “replay” their role: implementing decisions, observing the impact. The tools will also benefit the social worker for monitoring this rehabilitation process.

January 2008 - December 2009

Senior

Social Ethical and Privacy Needs in ICT for Older People: a Dialogue Roadmap

seniorproject.eu

up to 0.950 M€ EC funding (FP7)

While new technologies hold a great promise, they also pose risks to ethical issues. This **support action** will develop a systematic assessment of the social, ethical and privacy issues involved in ICT and ageing. This will help to understand what lessons should be learned from current technological trends and how to plan strategies for governing future developments, ensuring that new ICT meet the needs of senior citizens without compromising privacy and ethics.

January 2007 - December 2009

Share-It

Supported Human Autonomy for Recovery and Enhancement of cognitive and motor abilities using information technologies

www.ist-shareit.eu

up to 3.150 M€ EC funding (FP6)

To support the self-dependency and autonomy of older persons or people with disabilities, the next generation of assistive devices needs to be developed into transparent and easy to use adaptive systems. This **research project** will design such a scalable, adaptive system of add-ons to sensor and assistive technology, in order to inform and assist the user and his/her caregivers through monitoring and with mobility help. The system will be modularly integrated into an intelligent home environment and will rely on add-ons to be compatible with existing technologies and to achieve an easier integration into the existing systems. Scalability will be developed to insert or remove devices from the system in a simple, intuitive way.

January 2007 - June 2010

Smiling

Self Mobility Improvement in the eLderly by counteracting falls

www.smilingproject.eu

up to 2.250 M€ EC funding (FP7)

Ageing is characterized by functional changes in the sensory, neurological and musculoskeletal systems, affecting motor tasks including gait and postural balance: the main risk factors for falling. This **research project** is aiming at interfering with the vicious circle of muscle weakness and time delay of the Central Nervous System by applying unexpected external motion perturbations. For breaking the stereotyped motion schema and activating a new learning process to walking schemas, the system will use chaos and dynamic systems theories. The wearable non-invasive system will generate small height and slope perturbations during active walking.



January 2007 - April 2010

Soprano

Service Oriented Programmable Smart Environments for Older Europeans

www.soprano-ip.org

up to 7.000 M€ EC funding (FP6)

This **integrated project** aims to integrate older people with functional impairments into social life and increase their independence, by designing and developing innovative, context-aware, affordable, smart services with comfortable interfaces. Three strands of research and development are to be integrated. The stand-alone assistive technology provides products designed to compensate for motor, sensory and cognitive difficulties frequently experienced by older adults. The smart home technology enables the integration of advanced ICT in the home environment. Specific appliances and devices are integrated in the home environment to provide tele-care services and more overall control of the living space to support both professional and informal carers in their work.

November 2008 – October 2012

TOBI

Tools for Brain-Computer Interaction

www

up to 9.050 M€ EC funding (FP7)

This **integrating project** will develop practical technology for non-invasive brain-computer interaction (BCI) prototypes combined with other assistive technologies (AT), to augment their adaptive capabilities, in order to improve the quality of life of people with motor disabilities. In such a hybrid approach users can fuse brain interaction and muscle-based interaction or can switch between different channels naturally (based on monitoring of physiological parameters or mental states). Four application areas could be really impacted, in terms of pre-clinical validation: Communication and Control, Motor Substitution, Entertainment, and Motor Recovery.

September 2008 - April 2010

TREMOR

An Ambulatory BCI-driven tremor suppression system based on functional electrical stimulation

www.iai.csic.es/tremor

up to 2.140 M€ EC funding (FP7)

Tremor movement disorder is strongly increasing in incidence and prevalence with ageing. It is responsible for social inconvenience and functional disability, in particular for daily living. Treatments are not always effective. This **research project** will validate, technically, functionally and clinically, the concept of mechanically reducing the tremor through selective Functional Electrical Stimulation of muscles. The Brain Computer Interaction (BCI) detection of involuntary motor activity will combine CNS (Electroencephalography) and PNS (Electromyography) data with biomechanical data (Inertial Measurement Units, IMUs). The system will model and track tremor and voluntary motion.

July 2008 – June 2010

T-Seniority

Expanding the Benefits of Information Society to Older People through Digital TV Channels

tseniority.idieikon.com

up to 2.670 M€ EC funding
(Deployment CIP)

This **industry-driven pilot** aims at demonstrating in 5 countries efficient access to health and social care for the ageing population, through the integration of digital services that will be accessed by TV channels as an important segment of people is already acquainted with the TV remote control. User-centric integration of services, especially assistance programs (including trans-borders services) will cover a diverse range of care needs in a wide range of service modalities (home care, tele-assistance, mobile telecom services, tele-alarms, nursing services...). It emphasises the digital inclusion through TV in Prevention and Early Action side of the Social Care and the important role of Informal Carers in the lives of many elders will also be supported by the.



September 2008 - August 2010

UMSIC

Usability of Music for social Inclusion of children

www.umsic.org

up to 2.130 M€ EC funding (FP7)

This exploratory **research project** aims to support, through music, children who are at increased risk of being marginalized: due to social or emotional disorders, moderate learning disabilities, no or limited host country language skills (immigrants). From their first school year, low academic achievement, in turn, is one of the most significant individual risk factors of marginalization. Promotion of early competences in music and language might also affect positively children's emotional, social, and intellectual development. The system will open interactive environments for children to communicate informally with their peers by using familiar modern technologies, for both stand-alone as well as networked operations, with easy start up and impressive extensibility.

April 2007 – September 2009

USEM

USer EMpowerment in standardization

www.usem-net.eu

up to 0.385 M€ EC funding (FP6)

The standardisation community is prepared to interact with the growing group of customers of higher age and customers with disabilities users, but not enough well trained users from user organisations are available to act in this professional process. This **support action** offers a concept, to user organisations, to empower users for full participation in standardisation; to improve European exchange of experiences by networking; and it builds upon the experiences of the FORTUNE previous project (1997).

May 2008 - October 2010

VAALID

Accessibility and Usability Validation Framework for AAL Interaction Design Process

www.vaalid-project.org

up to 2.737 M€ EC funding (FP6)

This **research project** aims at facilitating and streamlining the process of creation, design, construction and deployment of technological solutions in the context of AAL. A 3D-Immersive Simulation Platform for computer aided design and validation of User-Interaction subsystems will support the design of the Human Interaction aspects in all the stages of user centred design, putting in practice the guidelines for verification and validation of the accessibility and usability facets. Virtual Reality and Augmented Reality scenarios will be used to verify interaction designs and validate the accessibility of the AAL products. This will help European industry, ICT companies specialized in Human Factors and User Interaction design, Research and Academia in streamlining their respective business for the Independent Living and Inclusion.

January 2007-December 2009

Vital

Vital Assistance for the Elderly

www.ist-vital.org

up 2.100 M€ EC funding (FP6)

The concept of Total Assistance can be understood as assistance anytime, anywhere, using any terminal and for any type of service. This **research project** intends to put this in practice by developing a set of technologies, platforms and applications to provide remote assistance for elderly users, including delivery of advice, assistance, information, education, entertainment as well as support in inter-personal communication. Research is needed for advanced user interfaces over readily available domestic terminals (i.e. TV and mobiles), intelligent systems able to offer personalised information and services in an active way and natural speech understanding and automatic summarising.



March /2008-June 2010

VM

Vital Mind

www.vitalmind-project.eu

up to 2.750 M€ EC funding (FP7)

Passive TV viewing can be transformed into dynamic activities of mental preservation and intellectual enhancement for senior citizens. This **research project** combines cognitive psychology, the television medium and advanced interactive Information Computer Technology to enable the elderly to do mind fitness exercises while they are sitting in front of their screen. The project will support the design of iTV-based applications to enhance cognitive training, in particular the development of authoring and production tools. It will also develop user control by detection of hand movements using vision and/or gyro and by non-voice vocal commands. Delivery via USB Flash disk will be promoted in addition to broadcasting.

April 2007 - March 2010

WAI-Age

Web Accessibility Initiative: Ageing Education and Harmonisation

www.w3.org/WAI/WAI-AGE

up to 0.900 M€ EC funding (FP6)

Activities under the W3C Web Accessibility Initiative (WAI) topic "Ageing Education and Harmonisation" aim at a better understanding of the needs of the ageing community in the context of existing Web accessibility guidelines. More direct contribution from the ageing community into W3C/WAI work will help revising and complementing educational materials to better reflect their needs and to pursue the standards' coordination to promote adoption and implementation of a common set of guidelines. This **support action** contributes to these efforts and also to the associated dissemination.

European Commission - DG Information Society and Media - Unit ICT for Inclusion
Office: BU31 01/66, B-1049 Brussels
Tel: +32 2 299 02 45 Fax: +32 2 295 13 00
Email: einclusion@ec.europa.eu



<http://ec.europa.eu/einclusion>