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All issues of the Newsletter may also be downloaded from the project website:

www.soprano-ip.org.

Editorial

Dear reader,

The SOPRANO Consortium is pleased to announce the third issue of the SOPRANO Newsletter. SOPRANO (Service-oriented Programmable Smart Environments for Older Europeans) is a research project funded by the European Commission, working in the area of Ambient Assisted Living (AAL) and independent living. The project aim is to design and develop highly innovative, context-aware, smart services with natural and comfortable interfaces for older people at affordable cost, and meeting the requirements of users, family and care providers and significantly extending the time older people can live independently in their homes.

This Newsletter keeps readers updated on the current status and achievements of the project. The special focus of the third issue is on SOPRANO's second phase of user involvement and the SOPRANO ambient middleware. The articles in this issue present the work, experiences, accomplishments, and lessons learned by the SOPRANO partners. In addition to this focus, the news and views section also provides notes on topics relevant to the fields of Ambient Assisted Living (AAL) and independent living. An overview of some relevant forthcoming events is also provided.

Please feel free to contact us for any further details, comments, or just to share your experiences in the above fields of interest.

SOPRANO consortium

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Generating design ideas for AAL systems together with older end users – SOPRANO's second phase of user involvement: methods, results and conclusions

SOPRANO applies an iterative approach of user involvement during its whole project duration. The first stage of research involved focus groups in four EU countries. The aim was to elicit user requirements in terms of key challenges to independence and to generate initial ideas for possible technological solutions. These ideas were concretised in terms of use cases (descriptive models of how a technology might be used).

The first stage of the research generated 11 use-cases that defined the initial requirements of the SOPRANO system. The 11 use cases not only reflect functionalities of the technical system being designed, but also the processes, actions and interaction of 'components' of the overall socio-technical system – i.e. informal and formal carers, service providers, GPs/hospitals etc. - and the assisted person himself or herself.

The set of SOPRANO scenarios developed within the framework of this first phase of user involvement were:

•"Medication reminding (I and II)" to support people if they have complex drug regimes or if they forget to take their medicine.

•"Open door" to enhance safety and security at home.

•"Safe", to monitor activity for signs of problems.

•"Fall", to adjust care to increasing frailty.

•"Easy to use home automation" to demonstrate smart home components that support independent living.

•"Exercise", to assist older people in recovery from a hospital visit.

•"Active", to monitor signs of problems and to support good routines.

•"Remembering", to cope with cognitive ageing.

•"In Touch", to combat social isolation.

•"Entertained", to counter boredom.

After this first phase of user research SOPRANO entered a second round of user involvement aimed at making decisions on conceptual design, i.e. what kind of functions are to be developed within the SOPRANO system, and what should the interaction sequences and modalities look like. These decisions are normally made by experts and presented to the users afterwards. SOPRANO aimed to change this situation by developing prototypes together with older people and their carers, in other words, the future users of the system.

In order to reach this goal, new methods for the involvement of users in the design process were developed and applied in SOPRANO. The idea in SOPRANO is that it is not the users who respond to ideas developed by experts, but rather, the experts should listen to the input from older people and their carers and adequately respond to their input.

The main objective of this second stage of user involvement was to validate and further explore use case ideas, utilising multimedia mock-ups and theatre presentations to help users visualise technologies prior to prototyping. Feedback from users was used to refine use cases and finalise requirements for prototypes. The second stage of research thus provided detailed design refinements in relation to each of the 11 use cases.

SOPRANO used two approaches, both variants of Scenario Based Design [1,2] for prototype testing:

- "Design idea generation methods": refers to eliciting design ideas from end users.

- "Design idea evaluation methods": involves users in refining design decisions taken in previous activities.

One of the main challenges was that potential users should create design ideas and evaluate a system that does not yet exist. The project therefore put great effort into the development of creative methods that would ensure the successful involvement of users in the very early stages of prototype development. Creative methods included theatre groups as well as specially designed focus groups applying multimedia demonstrators (Figure 1). Therefore the use cases were transformed into a play and scenes within the multimedia demonstrator and were regarded and discussed within small user groups.

A total of 72 users were involved in 27 sessions conducted in 4 different countries in this phase of the research.

Multimedia demonstrators and theatre groups turned out to be successful approaches for creating and evaluating design ideas. Results out of the second cycle of user interaction revealed valuable refinements to each of the existing use cases in relation to different design categories such as functionality, interaction sequence, or modality. Some general requirements also came up during the discussions that are valuable for almost every use case. This included amongst others that the system must be easy to operate, the modality for reminding, informing, and alerting must be configurable, and that having control over the system is essential. Furthermore, reminders and notifications should not interrupt TV programs, and the system allow for the possibility that users do not want to

Figure 1: Screenshot of a multimedia demonstrator scene, use case: "Remembering", coping with cognitive ageing

leave TV in stand-by mode. Additionally, users want be informed about what has actions that have been taken (e.g. help is on the way, appliances have been switched-off, a third person has been informed).

Results from the second cycle of user involvement will help technical designers to improve the prototypes. These prototypes have been lab-tested at four sites with more than 50 users in a third stage of research. The lab-testing of prototypes focused on usability of the different SOPRANO components. Results are for example, used to revise the menu structure for the user interface, or to facilitate the understanding of assignment of functionalities to remote control buttons. The components tested were: (Digital) TV, speech generation, speech recognition, remote control, avatar, touch screen and web-based GUI.

Tests were performed during November 2008 and February 2009. On the basis of these outcomes components will again be improved. SOPRANO's research and development activities will culminate in a real life evaluation and demonstration of the developed AAL solutions with 600 users across three countries.

SOPRANO'S 2nd Phase: The Multimedia Demonstrator

The multimedia demonstrator as main instrument within SOPRANO's second phase of user involvement – a short description.

Figure 2: Prototype Soprano House.

The multimedia demonstrator consists of Adobe Flash files that can be viewed in a web browser started via a html document.

The demonstrator starts with a side-view presentation of a prototype SOPRANO house (Figure 2). Four rooms are visible: the living room, the kitchen, the bedroom and the bathroom. The entrance door is also visible. Each scenario takes place in one or more of these rooms. By selecting a room, the available scenarios for this room appear. The moderator can then choose among the various scenarios and the four available languages. Each scenario can be played in two modes, firstly by selecting the "Play scenes" option for a scenario (in the relevant language). The specific scenario then plays according to a scene-to-scene format. This means that after each scene the demonstrator pauses, and the user needs to select the 'next scene' option to move on to the following scene. This format can be used in cases where pauses for discussion or explanations are required, e.g. when conducting focus groups. Secondly, by selecting the "Play All" option for a scenario (in the relevant language), the scenario plays continuously to the end. This format can be used in cases where the scenario needs to be played on its own, e.g. during a demonstration, or an exhibition. Moreover, the user has navigation tools such as pausing, restarting or moving to the next scene.

The multimedia demonstrator was applied in each of the design idea generation and design idea evaluation sessions. As a first step, the multimedia demonstrator was used to show participants the problem situation alone. After this the demonstrator was paused and people were asked whether they could identify with the presented problem situation. Participants were then encouraged to develop their own ideas (technology-free ideas first, followed by technology-based ideas) in relation to the problem situation presented. After this part of the discussion the whole use case was presented again using the multimedia-demonstrator. This was done scene-by-scene in order to ensure lively discussions and also to ensure that everybody understood what was shown on the screen. By using the pause function the moderators were also able to focus on specific items in the use case.

A detailed description of the approach and a typical focus group setting can be found in Deliverable 6.2.2.

SOPRANO"S 2nd Phase: The Theatre method

The approach followed by the SOPRANO project is to involve potential end users of the system in generating conceptual design ideas in order to ensure that the system will adequately consider the needs, requirements, abilities, and preferences of its potential users. The aim of the proposed Theatre Method was to find one conceptual design solution per use case. Theatre Methods are able to portray a situation in a very natural and immediate manner, which makes it easier to imagine and to remember a scene. Plays are very suitable for activating memories and emotions of spectators [3]. Moreover, feedback from the participants can be visualized "on the fly" by playing the

scene according to the ideas of the participants. Therefore, the Theatre Method allowed for very quick iterations and was very flexible to the users input. As described in D6.2.2 the Theatre Method was used combined with the Guardian Angel approach in a structured and moderated Focus Design Discussion (FDD). In the FDD the moderator encourages the participants' using target-oriented questions to develop their own ideas, and to give feedback to solutions that were presented. One central aspect of the FDD is the use of metaphors. The Guardian Angel metaphor introduced in D6.2.1 helps to generate user driven ideas, without being biased by way of explicit assumptions about what is possible with technology. The moderator asked the participants to imagine any help in the critical situation. The "Guardian Angel" could help in every imaginable way; he could arrange things and act like a wizard. The Theatre Method was conducted in the UK, in Newham, with a group of 8 participants by University of Liverpool and WRC. The problem scenarios were acted out by a professional theatre group. A discussion then took place, where the participants were asked to produce their own ideas about how to best support elderly people in the respective use case from their point of view. These ideas were collected. In a second step the theatre group played the design solution. The participants were asked to give their feedback on the solution. Subsequently, there was a discussion in which a comparison was made between the design ideas generated by the participants and the design solutions presented in D6.2.2. Finally, the group decided on one design solution.

In summary, the Theatre Method was experienced as extremely effective in terms of the expected advantages of the methods. The participants could identify with the actors and could imagine the problematic situation vividly. The older people were highly motivated to take part in discussions concerning the SOPRANO functionality. The Theatre Method was very effective in helping participants to visualize the use of the technology within the use case and to provide interactive feedback during the session. Furthermore, this method was experienced as very flexible as the interaction between the different participants (actors, researchers, and older people) was fluid and dynamic. For example, older individuals were able to make suggestions and interact with the actors directly and input the use case scenario. It was also seen as very flexible, because suggestions could be enacted and experienced in real-time. It greatly helped people participating in the creative process of ideas generation, and is seen as providing many insights in a complex situation. The Theatre Method represented an almost "realistic" situation, because the session allowed quite complex scenarios to be enacted, where mock-ups can only include very basic details.

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SOPRANO AMBIENT MIDDLEWARE (SAM): A context-aware scalable system

Introduction

Ambient Assisted Living (AAL) comprises a multifaceted domain with a variety of different scenarios incorporating knowledge, services, hard-, and software from different domains (see [2]). AAL scenarios supported by technical systems show diversity in terms of use cases and involved stakeholders. The main characteristics of the system architecture must therefore be flexibility, requiring openness (to ensure independent contribution of different stakeholder) and easy adaptability (enabling personalisation to the situation at place).

The next sections present the SOPRANO solution to an ambient intelligence based home care system: the SOPRANO Ambient Middleware (SAM). The SAM architecture concentrates on openness and easy adaptability and therefore provides a flexible technical system that is customizable to different AAL use cases and set ups. The SAM approach of explicit semantic abstraction of incoming data and subsequent specialization of service calls ensures a manageable configuration facilitating independent contribution of different stakeholders and re-use of system configuration in different settings. To exemplify the architectural approach the next section describes a specific SOPRANO medication scenario which is then analyzed and generalized to derive the main technical features of SAM.

Medication Scenario Example

Within the medication scenario an assisted person (AP) should be reminded to take medication. According to the scenario description a medication pill-dispenser is filled by a relative every week. The pill-dispenser is programmed to remind of medication on a particular time. When a medication becomes due, the pill-dispenser sends an event to SAM. This triggers an unobtrusive on-screen reminder shown on the TV while the AP is watching TV. On the other hand, if the person is not at home the system sends a SMS-message to the AP. In any case, if the medication has not been taken after a certain time a designated relative is informed.

Analysis of Abstract Scenario

The scenario description above shows a typical AAL scenario, and how they are commonly used to outline the behaviour of an Ambient Intelligence based Home Care System (AHCS). This description outlines a very specific scenario already adapted to the specific installation at place and preferences of its users. A deeper analysis of the scenarios shows that some parts of the description are very specialised. The underlying scenario should be supported regardless of:

- What kind of (if at all) an electronic pill dispenser is used.

- Which modality and service is used to send the reminder.

On the other hand, some parts of the description are abstract enough to be reused in different households and varying settings, such as:

- A general workflow specifying that a reminder has to be sent to the AP.

- A fall back procedure that informs an (informal) carer, in case the medication has not been taken

These two parts are independent of each other and show different characteristics. The general reusable part ensures compliance to individual, organisational, and legal preconditions and constraints. Its independence of sensors, actuators, and concrete services ensures reusability in different settings. The specialized part of the description contains the necessary information about the concrete hardware and service set up and thus ensures practicability of the scenario in a

specific installation at home. SAM distinguishes architectural components that independently deal with these two parts of a use case. Additionally, the different components are based on designated and semantically connected formalisms. These two features of designated components and formalisms allow for independent contribution and reuse of parts of the configuration.

SAM

Internally, SAM supports different formalisms that independently capture general (hardware/service-independent) and specific (hardware/service-dependent) parts of the configuration. The system architecture enables a process of **semantic abstraction** of incoming data -- described by a sensor-level-ontology -- to an abstract hardware independent AP-context-ontology (applying context reasoning algorithms, see Context Manager in Fig. 1). On the level of this AP-context-ontology SAM is able to apply an abstract formal use case description (based on BPEL extended with context-aware constructs, see Procedural Manager). In the last step SAM breaks down this abstract description to invocations of real hardware-based actuators and services that are available in the specific installation setting (achieved by semantic service matchmaking, see Composer).

In conjunction, SAM provides dedicated interfaces for entering abstract and specific parts of the configuration. These interfaces enable independent contribution and separation of concerns and thus ease the participation of different stakeholders during configuration. For more information on this part of SAM, please refer to publications [1] and [2].

These interfaces, components and formalisms operate on an explicit semantic representation of the environment of the AP, the SOPRANO Context Ontology. This semantic cross-linking enforces semantic coherence and consistency within SAM.

The next sections explain in more detail the functionalities of SAM. This explanation is based on a typical SAM-execution-loop as to be processed for the medication scenario. As shown in Fig. 1 a typical SAM-loop starts with an incoming sensor event at the Context Manager (CM) and ends with a service call from the Composer (Comp) with the Procedural Manager (PM) acting as gluing part in-between.

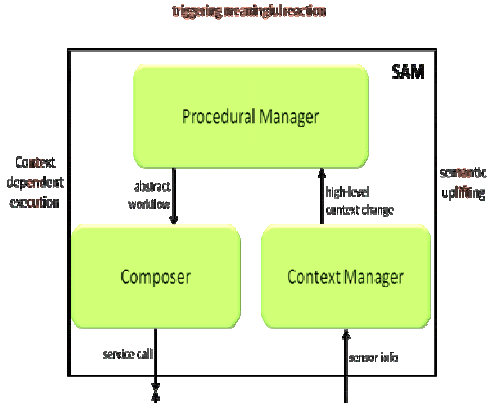

Fig. 1: Simplified SAM architecture overview

Context Manager

A typical SAM-loop for the medication scenario starts with a sensor event form the pill-dispenser sensor. An event is defined as state change and must comply with the sensor-level-ontology.

The sensor-level-ontology models the states that integrated sensors can achieve. In the example the relevant pill-dispenser functionality is modelled with a pill-dispenser sensor that is capable to release a certain medication (make it available so that it can be taken). Therefore, the states correspond to medication-released or medication-not-released, respectively. This kind of modelling abstracts from different underlying pill-dispenser technologies.

Furthermore, a CM-internal blackboard approach allows registering different algorithms that implement the semantic abstraction to a hardware independent ontological layer. This is achieved by exploiting additional contextual background information. In the

medication example a rule responds to the pill-dispenser event, generates an associated medication appointment and sets its due-status to due.

Additionally, electricity-consumption, identification (based on RFID) and positioning sensors are "semantically uplifted" in a similar way to derive that the AP is sitting in front of the TV.

Since the blackboard approach allows also more sophisticated algorithms than just simple rules (HHM, NN etc.), algorithms applying elaborated sensor fusion and consideration of history can derive information that is not directly provided by sensors.

Notions like medication appointment, TV, AP etc. are all part of the AP-context-ontology. Therefore, the situation of an AP who is watching TV and an appointment concerning the use of specific medication that is connected to this AP is represented as hardware independent. Accordingly, this situation could be derived from different sensors, or even provided by completely different means. The medication-appointment could, for example, also be introduced via the Soprano-Calendar GUI completely independent of any pill-dispenser.

Procedural Manager

Once the medication-is-due event has occurred, the system reacts by triggering a predefined abstract workflow description (WF) similar to the one mentioned above:

- When medication-is-due event occurs remind AP.

- In the event AP is watching TV, use a TV-based reminder service.

- In the event the person is not at home send an SMS.

- Use soprano-main-communication-device (which, in SOPRANO, is a commonly a touch screen that can display and play messages, each communication attempt is indicated by sound and blinking light).

- Repeat the last three steps every 20 minutes for one hour until medication has been taken.

- If after 1 hour the medication has not been taken send SMS to the responsible (informal) carer.

This WF is predefined, hardware-independent, and based on Business Process Execution Language (BPEL). Reusability is assured by a minimal installation package to which all SOPRANO installations must comply. Special additions of context-aware elements to the BPEL-language allow for incorporation of preferences and constraints. This includes the special reaction in case the AP is watching TV etc.

Composer

During execution of the WF these abstract service requests (TV-based reminder service, SMS, SOPRANO standard communication service) are mapped to concrete hardware-based services (set top box service that displays onscreen menu) at runtime.

Semantic service matchmaking based on the Diane Service Description (DSD) exploits semantic descriptions of service requests and services (see [4]). If more than one service is available, the service is selected that matches best in the current situation. The selection can incorporate additional contextual data and preferences for certain services.

In the medication example the contextual WF elements indicate that the AP is watching TV which could lead to invocation of a sound-message, avatar-service, or set-top box service that plays a messages via the TV (via TV-sound or TV-screen). Since the AP-context-ontology states that the AP is hearing-impaired the onscreen message-service is selected as best matching service.

Usage of semantic service descriptions allows development of services against the SOPRANO ontology in contrast to development against the service requests. The developer has to deal with

the ontology, not with abstract process description or other parts of the system enabling again independent contribution and separation of concerns.

Semantic matchmaking establishes dynamic and automatic linking of requests and services during runtime even in the case of different service interfaces or different levels of abstraction.

Finally, taking the medication out of the pill-dispenser leads again to a sensor-level event, which is semantically uplifted to a "medication has been taken statement". This causes the workflow execution to end.

Conclusion

The SOPRANO Ambient Middleware enables a flexible, open, and adaptable AAL-system customizable to the specific needs of the AP and facilitating context-aware workflow and service execution.

This article describes in which way SAM enables a process of semantic abstraction and concretization that allows for independent contribution of different stakeholders and re-use of system configuration.

To achieve these functionalities SAM operates on Open Service Gateway initiative (OSGi) and adds a layer providing context management (see Context Manager in Fig. 1), workflow management (Procedural Manager), and workflow execution (Composer). To enforce semantic coherence these components operate on different semantic descriptions captured in the SOPRANO Context Ontology.

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News and views

ICT & Ageing Project made Country profiles online available and published a handout with Preliminary Findings

The ICT & Ageing – Users, Markets and Technologies' study is funded by the European Commission. The primary aim is to identify existing market barriers that hinder uptake of technologies for independent living and identify recommendations for action in order to address older peoples' needs and market potential.

Core application domains that have relevance to this study can be distinguished as follows: 'Social alarm', 'telecare', 'telehealth' and 'Smart homes'.

The first phase of the study has focused especially on developing a baseline view of the 'market' situation according to these sub-domains across 16 countries in Europe and beyond. This concerns the level of deployment that has been achieved so far as well as other market features. Apart from providing a new contribution to the existing knowledge base, the results provide a basis for identification of key issues for more focused investigation in the next phase of the study.

Furthermore the study team is interested in receiving any corrections and/or additional information that may help to update or improve the understanding of the current state of affairs in this country. This may concern information on relevant market developments, policies and/or interesting examples of ICT deployment. Contribution is possible by using the comment function provided at the project website at the end of each of the seven main parts of the country profiles.

More information about the project, the country profiles and the handout can be found at: http://www.ict-ageing.eu/

SOPRANO, PERSONA, NETCARITY & MPOWER – Second conjoint Workshop on AAL as part of the European Conference on Ambient Intelligence (AmI-08) in November 2008

The positive feedback from the first workshop has encouraged the organisers to plan a second conjoint workshop. The second workshop, however, expanded in terms of the participating EU projects by including Netcarity and MPOWER projects, as well as narrowing down its focus by changing from the more general field of "AmI" to the subordinate discipline "AAL", which is the actual focus of the projects that participated.

For further information on the Workshop please contact Elena Avatangelou: elav[at]exodus.gr

SOPRANO's WP 5.2 "Second phase prototype testing", Tests successfully held

Work package 5.2 takes on board prototypes of the major SOPRANO building blocks produced, and carries out appropriate user testing, usually in a laboratory setting, with end users as appropriate. Within two phases pre-tests were carried out during November in the following sites: San Sebastian (Spain), Eindhoven (The Netherlands), West Lothian (UK).

For further information on the WP 5.2 please contact Sonja Müller: sonja.mueller[at]empirica.com

Forthcoming Events

2nd International Conference on Pervasive Technologies Related to Assistive Environments – PETRA 2009, 9 – 13 June, 2009, Corfu, Greece

The PETRA Conference brings together different types of technology to address an important social and healthcare issue: as the world's population ages, there is growing interest in solutions for the in- home care of the elderly as well as for the care of people with Alzheimer's, Parkinson's and other disabilities or traumas. PETRA (which means "stone" in Greek) reflects the needs of the domestic environment, or "Oikos" as it was known in ancient Greece, but from a technological perspective. People's living environments are particularly important in an increasingly crowded and complex world where the need for inclusiveness and connectivity with the rest of the world is key. PETRA addresses the facts that, as people grow older; they will increasingly rely on technology to be able to stay in their homes.

More information is available at:
http://www.petrae.org/

7th International Conference On Smart homes and health Telematics (ICOST2009), 1 – 3 July, 2009, Paris, France

Initiated in 2003, the ICOST conference aims to develop an active research community dedicated to explore how Smart Homes and Health Telematics can foster independent living and offer an enhanced quality of life for ageing and disabled people. In the past six years this community has grown, with conferences held in Europe, Asia and North America. For its seventh edition, ICOST is back in France where it was created. This will provide the opportunity to reflect upon the past 7 years in addition to looking forward to plan for the years ahead. ICOST2009 will have the focus on the deployment of technology and usage with the involvement of both industrials and end users. Demonstration sessions and brainstorming sessions with users will be organised in addition to regular paper and poster presentation sessions.

More information is available at:
http://www.icost-conference.org

World Congress on Gerontology and Geriatrics Paris 2009, 5 – 9 July 2009, Paris, France

Every four years, the World Congress of Gerontology and Geriatrics represents a unique event attended by experts from around the world to discuss the latest findings in the field of ageing. The 19th congress, which is taking place in Paris in 2009, is particularly important, as it coincides with an ideological u-turn. Lifespan extension and the growing number of elderly people, once considered as catastrophic, are now viewed as indisputable progress. There is growing consensus that population ageing is not necessarily contributing to economic decline. The selected theme: “longevity, health and wealth” aspires to illustrate this change in attitude vis-à-vis a global phenomenon of unparallel scale. With the support of the IAGG (International Association of Gerontology and Geriatrics) the “Société Française de Gériatrie et Gérontologie” is delighted to organise an event that will bring together the top representatives from all branches of this expanding discipline. Congress main themes are:

- New technologies (biomarkers, imaging, stem cells), Gerontechnology
- Network of excellence, Integrated models of care
- Demography, Economy, Retirement policies, Gerontology in developing countries
- Social policy and social welfare
- Metabolic syndrome, Diabetes, Obesity, Nutrition, Food
- Mechanisms of ageing, Longevity, Centenarians

- Ways of affecting the ageing process, Anti-ageing
- Education and multidisciplinary training, Primary care
- Frailty, physical exercise, Osteoporosis, Rehabilitation, Sarcopenia, Falls
- Intensive care, Long-term care, End of life, Ethics
- Alzheimer's, Dementia, Cognitive decline, MCI
- Why geriatrics?
- Psycho-geriatrics, depression, delirium
- Cardiac failure, atherosclerosis, vascular disease and hypertension, COPD, cerebrovascular disease
- Gender-specific medicine, Menopause, Ageing male
- Cancer advances in geriatrics
- Ageing and disasters
- Family and care giving, Aging-environment interactions

More information available at: http://www.gerontologyparis2009.com/site/view8.php

7TH World Conference, International Society For Gerontechnology, May 27 - 30 2010, Vancouver, Canada Marriott Pinnacle Hotel.

Host organization: Gerontology Research Centre, Simon Fraser University.
This conference brings together people who design, develop, prescribe, research and use technology to enhance the functional capacity and quality of life of older adults. It's the perfect venue for dialogue between engineers, ICT experts, health and social care professionals, architects, social science researchers and educators and others working in this multi-disciplinary field.

Topics to be discussed include cutting-edge innovations in: smart homes and smart materials, robotics, mobile and wireless communication systems, online goods and services, computer games, and applications of new technologies in health and social care. The latter include management of chronic illness in the community and supporting people with dementia living at home or in congregate settings. The conference will also address markets and business issues including: understanding the older consumer, developing effective markets for care technology, connectedness and the digital divide, and knowledge transfer from research into commercial products.
For further information Visit: www.sfu.ca/isg2010

More information?

For additional information about the project please visit the SOPRANO **project website**, at http://www.soprano-ip.org.

On the website you can find the following information:

- **About the project**
  General information about the project and descriptions of the main objectives, approach and information about the SOPRANO advisory board.

- **Project team**
  List of the partners, containing a short profile, contact details and links to each partner's internet sites.

- **Publications/Results**
  Project information delivered via newsletter, deliverables, published papers, presentations and posters.

- **Further reading**
  Articles and events related to Ambient Assisted Living and links to related projects.