



# International Support of a **C**ommon **A**wareness & Knowledge **P**latform for **S**tudying & **E**nabling Independent **L**iving

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## EXECUTIVE SUMMARY

This document represents the culmination of a 2 year project to explore the current state with regards to technologies for independent living for older adults and to disseminate our findings to stakeholders in the field. Our focus was chiefly on the scenarios in the European Union (EU), the United States of America (US) and Japan, countries where the ageing of the population is currently on par or exceeding the ageing related challenges facing the EU. This research was conducted with 3 aims in mind:

1. To aggregate and consolidate information and technical details from the extremely diverse range of academic and industrial projects currently available or under development
2. To identify gaps in the current state of the art
3. To identify areas where the EU, US and Japan could co-operate to promote and facilitate research into ICT for ageing

The stakeholders in the ICT for ageing field are also a diverse group, comprising legislators, insurers, clinicians, users, researchers and industry each with specific interests and requirements, from the 'top level' view of legislators to the 'end-user' requirements of consumers. Those wishing to develop products or services in this area must consider the requirements of all members of this user base, something that is currently difficult due to the wide ranging levels of expertise and user groups within the field.

In order to best address this heterogeneity the CAPSIL consortium incorporates members from academia and industry with specialities in a wide range of fields, from software and engineering to clinical trials and patient requirements.

Having identified the dissolute and disparate nature of ageing research the consortium began an extensive program of information gathering, with a view to educating ourselves as to the current state of the art. This has given us a solid knowledge base from which to begin fulfilling our aim of disseminating information concerning ICT for ageing to the wider community.

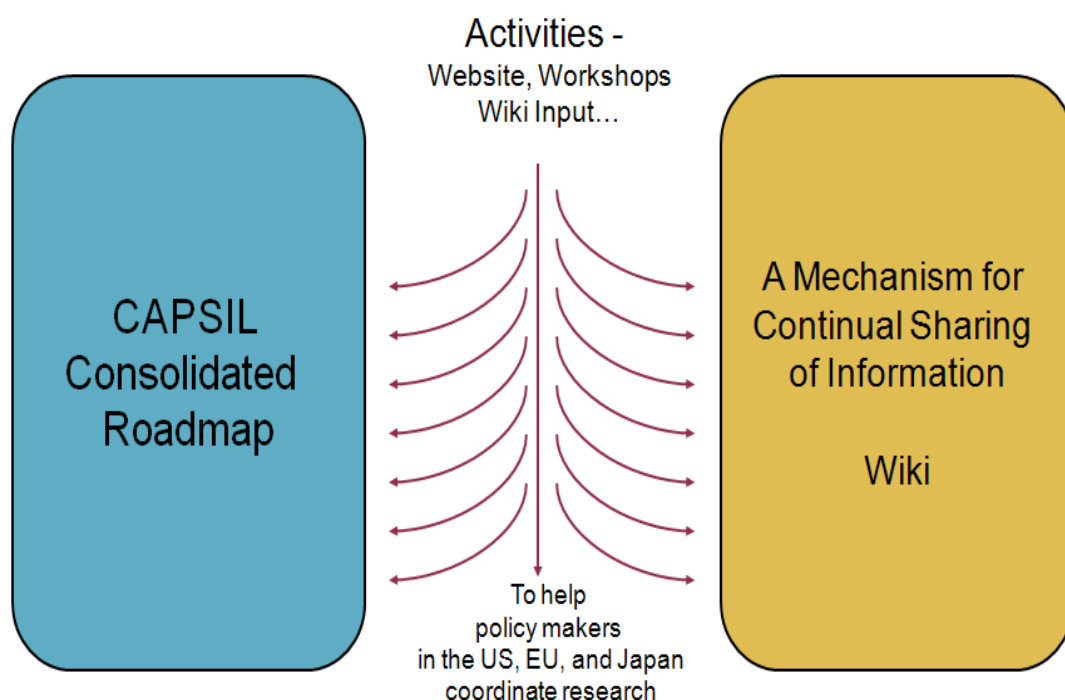
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Since the inception of the project, the consortium has engaged in comprehensive consultations with representatives from all stakeholder groups. Four CAPSIL organised workshops have allowed us to engage in dialogue with, and seen our findings presented to, representatives of the EU, the US and Japanese governments, key players from non-governmental organisations, academic researchers and representatives from the ageing-oriented manufacturing and service industries. In addition we have attended and presented at numerous academic conferences, networking events and policy consultations.

We have also facilitated meetings between policymakers in the EU, US and Japan with a view to fostering international research collaboration.

Our initial research led to us drawing up 6 categories to form the basis for our investigations and ultimately the chapters of this document; Background and Clinical Requirements, Intervention Systems, Home & Mobile Monitoring, Wireless Body Sensor Networks and Software, with a final Strategy chapter summarising the previous chapters and outlining promising directions for future research and international cooperation.

In addition to this document the consortium have also developed a companion internet resource, the CAPSIL Wiki, where detailed information on technologies, systems and specific solutions for age-related conditions can be found. This is a crucial outcome of the project, gathering together much of this information for the first time and presenting it in a way that is as accessible to the user with a casual interest as it is to the healthcare professional or governmental legislator. While this roadmap document is aimed at the EU funders of the CAPSIL project, we anticipate the Wiki to be a valuable on-going resource to anyone with an interest in technologies for healthy ageing and independent living. An advantage of using the Wiki structure is that it can be updated by its users and so takes on a life beyond the end of the CAPSIL project. Throughout this document you will find references to the CAPSIL Wiki and most of the information we have gathered on specific technologies and systems is stored there.



**Figure 1** – CAPSIL Workflow

The purpose of this document is to outline the current technological baseline, identify key issues within each area/chapter, highlight any gaps preventing progress, illustrate differences and commonalities between the requirements for the EU, US and Japan, and to outline recommendations as to areas in which the EU can act to promote industrial and research collaboration between the different geographic areas. We have also provided several 'Visioning' scenarios as an aid to anticipating what technologies might be required to facilitate independent living for older adults in the future (around 2025) and as an illustration of how social and cultural differences create different technological requirements and solutions.