STIMULATE E2 Mobility Services for Elderly People

D1.1 – User Acceptance, Needs and Values Regarding to the STIMULATE System

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REPORT-RESTRICTED

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Executive Summary

Deliverable 1.1 User acceptance, Needs and Values regarding to the STIMULATE system gives a detailed overview on the procedures, ethical constructs of the user related studies that are conducted during STIMULATE Project. This document also introduces the overview of user studies conducted during the project in order to get closer insights to user acceptance, needs and values. The document clearly shows the requirements and how they are elicited during studies, it points to all relevant references that might effect the development process of STIMULATE Project. This work is a collaborative result of all partners that are involved in the WP1, T1.1 and T1.2. For details and focus of document see: Focus of the Deliverable. Detailed authorship information related to studies is available on: General Notes and Ownership Information.

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Focus of the Deliverable

Deliverable 1.1 User acceptance, Needs and Values regarding to the STIMULATE system gives a detailed overview on the procedures, ethical constructs and user studies conducted during the project in order to get closer insights to user acceptance, needs and values.

The deliverable in detail contains several sets of studies that aim to aswer to the relevant information needs of acceptance, communicability, intuitiveness and simplicity aspects of STIMULATE. It also gives clear outlines to the preparation activities, selection of participants, preparation of questionnaires, as well as new types of studies. The ethics requirements, informed consents and other aspects of conducting such studies are also legally debated and documented.

Studies conducted during the initial phase of STIMULATE project contains, pre-studies such as the pre-survey with design-experts on travel planning, self-prototyping in the field and expert workshops with travel organising senior user groups specialized to senior and disabled people. The expert workshops as the last chain of pre-studies give insights to different rituals of travelling among seniors, and to heterogeneity of the expectations. Further 4 focus groups are conducted, 2 in France and 2 in Austria, covering 34 senior individuals, in order to define detiled requirements for acceptance and adoption of STIMULATE concept.

A detailed literature survey is conducted in the area of seniors and new technologies, especially the technologies that are base to this project. General surveys on ethics, accessibility, aging and tourism, examples to existing products and projects are also considered in order to create the framework, where STIMULATE design is based.

As a result, during the studies, within the help of methods and processes that give insights to the user needs in a detailed way, like general surveys, focus groups, field observations and semi-structured interviews, and with their placement in relation to literature, this document gives an overview to the challenges that are relevant to STIMULATE's acceptance, adoption and market potential.

The conclusions of this deliverable feed directly into all workpackages to ensure a strong user centred focus of the project. At any point, where a necessity is seen for further

analysis of some aspects of user requirements, this document can be re-visited and advanced. As D1.1 document is vey detailed and complex in nature, a more practical document will be created to proceed in industrial level. It is planned to select and reflect the practical issues that are directly relevant to the STIMULATE Project in the following deliverable 1.2. Due to the changes in deliverable deadlines and dependencies after kick off meeting in September 2011, it is decided to include the study results to this early deliverable, even if they are not completed and combined to a framwork. Therefore d.1.1 includes study results of ongoing user studies additional to the preperation guidelines and initial literature. If needed this studies can further be extended and the new data collected can be summarized in a new version in M12, although the results feeds the development process interactively prior to M12.

In the following months, with the help of existing literature, these studies are planned analyzed and combined to a travel ICT needs and motivations framework for European Seniors. Morover, the requirements that are defined in this document will further be analyzed in details for creating specifications, usage contexts and scenarios for future STIMULATE Project. This document is therefore to be taken as a basis for the following deliverables D1.2 and D 1.3, for elicitation of requirements and building of scenarios.

Relevant Literature

1. Seniors in EU, Austria and France, Tourism and Mobility

According to a report of European Commision[1] "The number of people over 50 will rise by 35% between 2005 and 2050" and "the number of people over 85 will triple by 2050"with an increase in cost estimations of care in Europe, Japan and US (pp:nn.).Also in 2005, the estimation was 68 million people had several forms of age-related impairment, which is prognosed to grow to 84 million in 2020 (ibid.).

In industry and business level, aging related support systems have long been a study topic depending on these prognoses. Several groups and networks have been set, where the discussion has concentrated on the potentials and sucsess of those systems in market[2,3] In a recent declaration, Ambient Assisted Living Community gives various reasons to the needs of ambient assisted living systems in the area of aging society, especially for supporting people on the move.[4]

It is clear that ICT solutions can support elderly in many facetes of life in their mobility and independency. Issues that are covered by ICT reports[5] and might be relevant for STIMULATE project are selected as follows:

- (Connecting with existing) social communication: easy access to phone and video conversation in the area of *support on the move*

- Daily shopping, travel, social life, public services *support on the move*

- (connecting with existing) Reminders in the area of *support on the move*

Regarding market potential and success of such applications, it is clear that this is very related to the values and needs of the target group. In economic level, "It is estimated that Europeans over 65 possess wealth and revenues of over €3,000 billion, thus

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[1] Overview of the European strategy in ICT for Ageing Well:
http://ec.europa.eu/information_society/activities/einclusion/docs/ageing/overview.pdf (last accessed:17.11.2011)
[2] Aaliance The European Ambienet Assisted Living Innovation Alliance: http://www.aaliance.eu (last accessed:16.11.2011)
[3] AAloa Workshop:http://aaloa.org/workshops/amb11 (last accessed:17.11.2011)
[4] Website of Lecce Declaration Group: http://www.aalforum.eu/group/leccedeclaration (last accessed:14.11.2011)
[5] Overview of the European strategy in ICT for Ageing Well:
http://ec.europa.eu/information_society/activities/einclusion/docs/ageing/overview.pdf (last accessed:17.11.2011)

representing a huge market potential" [6]. In a closer look, the usage of smart home applications such as age-related assistance in shopping, dressing, moving independently are expected to triple from 13 million people to 37 million people from 2005 to 2020. [7]

Aging statistics and prognoses of European Commision[8],shows that percentage of people 65+ in Austria in 2008 was 17.2, with an expectation to 26.1% in 2035 and 29.1 in 2060. In the oldest old segment, people 80+ the percentage was 4.6 in 2008,and is expected to reach to 7.2%, 11.4% in 2035 and 2060. Similar to most of other European countries, the old age dependency ratio is expected to double in following 50 years from 25,4% in 2008 to 50,6% in 2060.

Aging statistics and prognoses of European Commision[9] shows that percentage of people 65+ in France in 2008 was 16,5, with an expectation to 24,4 % in 2035 and 25.9 in 2060. In the oldest old segment, people 80+ the percentage was 5 in 2008,and is expected to reach to 8.5%, 10.5% in 2035 and 2060. Similar to most of other European countries, the old age dependency ratio is expected to double in following 50 years from 25,4% in 2008 to 45,2% in 2060.

These statistics are parallel to ongoing discussions and supports the need of ICT technologies for older members of the society, and their independency in the future.

One of the working documents of the commission on digital agenda[10], which was based to national statistical offices and results of Eurostat, following findings are concluded regarding technology usage in Austria and France might be related to selection of back-end support technologoies for STIMULATE:

Broadband:

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[6] Overview of the European strategy in ICT for Ageing Well:
http://ec.europa.eu/information_society/activities/einclusion/docs/ageing/overview.pdf (last accessed:17.11.2011)
[7] Overview of the European strategy in ICT for Ageing Well:
http://ec.europa.eu/information_society/activities/einclusion/docs/ageing/overview.pdf (last accessed:17.11.2011)
[8] Eurostat Survey Prognoses:
http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Tourism_statistics_at_regional_level
[9] Eurostat Survey Prognoses:
http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Tourism_statistics_at_regional_level
[10] Digital agenda working report, country profiles: http://ec.europa.eu/information_society/digital-agenda/documents/countryprofiles.pdf (last accessed:17.11.2011)

In Austria, fixed broadband penetration is increasing at a low rate, below the EU average(22,7% against EC average of 24,8%), which is partially ofsett by large-intake of mobile internet (p:138).Household penetration is sligltly better than EU average (65% having an internet connection, and 56% having a subscription), and enterprises on only 77% (ibid., p:138)

France is one of the few countries with 100 % DSL coverage. Broadband penetration is still on the increase, rising to over 30 % in 2009, which is well above the EU average (ibid., p:154). The most popular activities are internet banking and looking up information about goods and services, as in most other countries. The least popular activity is doing online courses (ibid., p:154).

Internet Usage:

Austria ranks in Europe as10th in regular internet usage (at least once a week) and 12th in frequent internet usage (almost every day) with 67 % of the population are being regular internet users in 2009 (above the EU average), up from 55 % in 2006; "48 % were frequent users, up from 39 % in 2006" (ibid., p:138). Also regarding non-usage, only "a quarter of the population has never used the internet — somewhat better than the EU average of 30 %"(ibid. p:138).

In a closer look the digital agenda report indicates that Austrian citizens prefer some activities such as "looking for information on goods and services, internet banking and seeking health information" to "looking for a job, doing an online course, seeking information about education and training, downloading video games or watching/ downloading films and music" (ibid. p:138).

In France, "the proportions of both regular and frequent internet users have been rising in recent years and are currently slightly above the average for the EU. Around a quarter of the population has never used the internet, compared to a third for the EU" (ibid., p:154).

According to the SeniorWatch studies[11], that concentrated on the ICT usage among older people, ICT intake of older people is in parallel to general intake among all other

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[11] SeniorWatch 2 Final Report:
http://ec.europa.eu/information_society/newsroom/cf/itemdetail.cfm?item_id=4286

groups but "old age groups will remain at a rather low level of uptake. It is almost certain that the age divide will remain significant for the foreseeable future" (p.24).Again similar to general usage patterns, "All in all, the 55+ age group is less active in each category but (amongst those who were Internet users) clearly using the Internet almost as often as Internet users in the younger age groups for e-mail, online banking, seeking health information, seeking information on travel/tickets and booking for events" (p.26).

Historically following, In 2001, Seniorwatch found already 27% of regular (weekly) users, and today it is 44% (37% regular users) of the older population, connotated to internet in general(ibid.; p.30).

Today, 47% have home access, 39% have ever used the internet, and most of them (31% of the 50+ population) use it at least once per week, a good quarter (27%) of older people even daily. Broadband access is mentioned by 29% of older people, a tremendous increase compared to 2001 (DSL had a mere 1.2%, and cable modem, with 1.4%, had hardly been mentioned more frequently). (ibid.; p.34).

Here the motivations are diverse.

"Among regular internet users, the most common purposes are information seek about products and services and e-mail. E-mail is used by most to stay in touch with family. Almost half of internet users also use e-mail to share photos, a quarter as a means of communication with associations, clubs and other groups they belong to. Only 4% have emailed with their GP or other practitioner. Almost 80% use the internet as a news media. Two thirds use the internet to inform themselves in health matters, most do so to find information on a specific condition, 30% in order to follow up on and 14% in preparation of a GP visit. More than half also use it for buying goods and services. Almost half indulge in spending time online without any particular reason, to pass time or "for fun". Almost a quarter listen to the radio or watch TV online, and 22% make phone calls via internet". (ibid.; p.34).

„For mobile phones, substantial market penetration was beginning to emerge only in the beginning nineties with the 2G GSM phone. Today, we find 80% of older population having a mobile phone, compared to 48% in 2001"(ibid.; p.30)

„Digital photography is done by 43% of the older population. Of these, most almost half copy their photos on CD and 40% share them via e-mail. Posting on the internet and sending them via mobile phone are only used by 17% and 16 % respectively" (p.39)

According to tourism activities statistics of Eurostat (2010)[12], Tourism increased by 7.2 % overall from 2000 to 2009 in the European Union, having Italy, Spain and France as the most popular destinations, the lead was the Île-de-France region, which includes the French capital Paris, tirol in Austria was ranked 11th.

On the mobility needs of older people in general an extensive literature survey was conducted in 2006 by Whelan et al.[13]on the elderly and mobility. The findings from various travel surveys that were used during Whelan et. Al. study give important clues on travel patterns of elderly and general understanding of mobility. The followig conclusions might be relevant to STIMULATE System:

Older people continue to have travel needs after retirement, although the nature of these needs may change (Whelan et al.; p.3). Overall, as people age: they make fewer journeys, mainly due to reductions in the number of work journeys and the average leugth of all journeys consisteutly decreases. The number of journeys made for non-work activities remains almost constant to the: age: of 75 and decreases thereafter, with the length of these journeys also reducing with increasing age (ibid.; p.3). However relative to earlier cohorts, older people are increasingly driving greater distances, partly due to their greater access to cars (ibid: p.4).

Mobility is more than travel: ... "mobility is being able to travel where and when a person wants, being informed about travel options, knowing how to use them, being able to use them and having means to pay for them..."(Suen &Sen, 2004 as cited in Whelan et al. (2006 : p.4)

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[12] Eurostat 2010:
http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Tourism_statistics_at_regional_level
[13] http://www.monash.edu.au/miri/research/reports/muarc255.pdf (last accessed:18.11.2011)

Even again extended by Metz 2000, mobility means:

- Travel to achieve access to desired people/places

- Psychological benefits of movement

- Exercise benefits

- Involvement in the local community

- Potential travel-knowing that a trip could be made even if not actually made, for example in the case of an arising emergency. (as cited in Whelan et al., 2006)

All these aspects of mobility are needed to be considered as important for STIMULATE system, due to their direct relation to the experiencing of „being mobile".

Regarding tourism activities, the country as well as individual institutions and private companies organise lots of events for seniors. Specific offers and requirements related to older people are further discussed in Expert Workshops Part of this document.

1.1.1. Examples from Tourism and Accessibility Studies in France and Austria

There are ongoing studies outside of the ICT research that concentrate on older user's needs and needs of people with disabilities in tourism and on their mobility. In European level an example to these studies is Calypso Project[14] funded by EC. Calypso study, which concentrates on social toruism aims to create equal opportunities for everyone in tourism.

The four target groups they define are: seniors and pensioners, youths, disabled persons, and families in difficulties (social, financial etc.), which might as well be important for STIMULATE Project. In their good practice reports, they concentrate on following issues (selected according to relevance)[15]:

The potential beneficiaries of social toruism are defined as above. In detail the distribution of people with accessibility needs include elderly (over 65 years old), people with hidden or unhidden special needs. People with special needs have the following needs: mobility impairment, visual impairment, deafness, speech impairment, mental and intellectual

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[14] http://ec.europa.eu/enterprise/sectors/tourism/calypso/index_en.htm (last accessed:25.11.2011)
[15] http://ec.europa.eu/enterprise/sectors/tourism/files/docs/calypso/calypso_study_annexes_en.pdf (last accessed: 25.11.2011)

impairments (ibid.). Accessibilty chain in tourism is defined in the following points (ibid., p. 18)
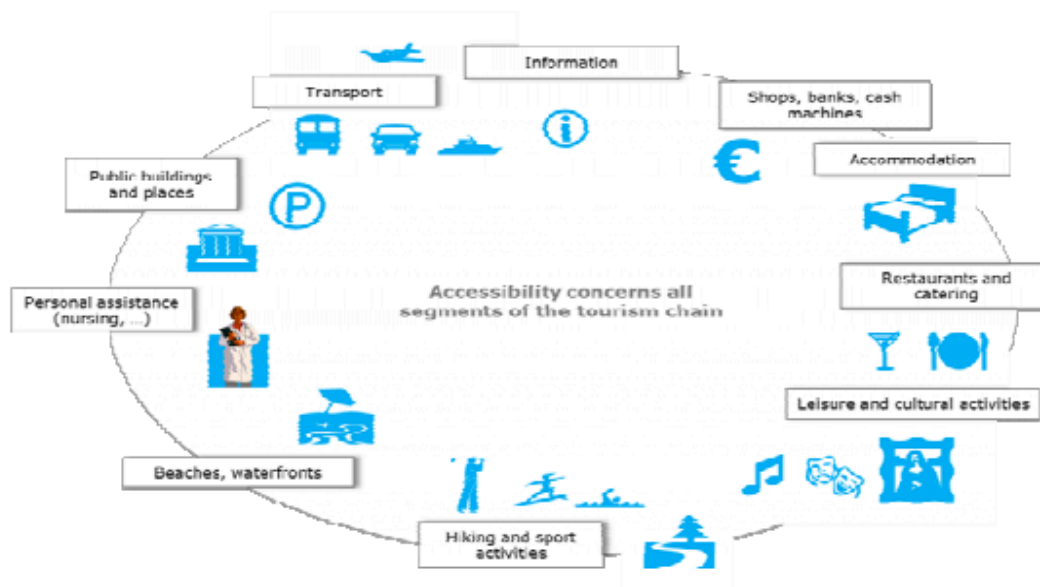
Figure 1 Accessibilty concerns all segments of the tourism chain (ibid., p:18)

The needs and routines of people with impairments can be summarized as follows:

"For those people with disabilities who can travel, there is no major difference in travel habits compared to people without disabilities of the same age and social class. The expectations of people with disabilities are to rest, relax, discover and escape from routine, including to not beconstantly confronted with access barriers"(ibid., p18).

Main accesibilty needs are on:

 built environment, transport, equipment and technical aids, personal assistance, medical care, and information about services and facilities

"Consumers with disabilities generally prefer tourism accommodation to be in the mainstream tourism sector and not 'specialist disabled'. Nevertheless, some persons with disabilities are dependent on specialised care, medical treatment and services, so would need to use spec accommodation. The main point for the target is to have the freedom to choose between mainstreamed and specialised tourism accommodation" (ibid., p:18).

Traveller accesibilty information platform:

"The website www.Europeforall.com, developed in a European Commission funded project named OSSATE, provides accessibility information about tourist venues in six countries (Austria, Belgium, Denmark, Greece, Norway, Sweden and the United Kingdom)"(Calypso Final Report, 2010, p.19)[16].

Moreover the document contains detailed list of country specific stakeholders, ministeries and similar working on this area.

Handidays.com, UK DisabledGo and Openbritain portal are given as examples for accessible tourim info online)"(Calypso Final Report, annexes)[17].

Older Travellers and seasonal preferences:

"Spring and early autumn are the preferred low season periods to travel by seniors in 10

Countries: Austria, Belgium, Croatia, Czech Republic, Hungary, Lithuania, Poland,

Slovakia, Spain and Turkey. Main reasons are stated as:

• Lower costs and discounts offered for seniors

• Better life quality, with the climate not too hot and facilities not overcrowded

• Off season travel was seen as acceptable with some reservations in 5 countries – Cyprus, France, Latvia, Malta and Slovenia, for the following reasons

• Intergenerational holidays: limited to school holidays. For seniors with comfortable income/middle class, a common situation is to spend main holidays

Off- season travel (or travel all together) is less accepted in Greece and Romania. Main reasons stated are low income and strong family links (take care of grandchildren, house "; Calypso Final Report,2010,p.80)"[18].

Another example project is "Tourismus für Alle" from Austria.The public documents of the project gives information of everyday problems on accessibility in travel activities. The practical implications and checklists can be used for STIMULATE Project.

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[16] http://ec.europa.eu/enterprise/sectors/tourism/files/docs/calypso/calypso_study_annexes_en.pdf (last accessed: 25.11.2011)

[17] http://ec.europa.eu/enterprise/sectors/tourism/files/docs/calypso/calypso_study_annexes_en.pdf (last accessed: 25.11.2011)

[18] http://ec.europa.eu/enterprise/sectors/tourism/files/docs/calypso/calypso_study_annexes_en.pdf (last accessed: 25.11.2011)

2. Senior Mobility Needs & New Technologies

By 2020, one in four of the European population will be aged 60 years or older, with the largest increase expected in the age group of 75 years and above (IJsselsteijn , Nap, De Kort, & Poels, 2007)[19]. The demographics are changing and society needs to take into account these changes. The elderly are one of the fastest growing segments of the European society and, compared to the younger population, have a large amount of disposable income (McMurtrey, et al. 2010)[20]. The consumer power of the elderly has increased which allows for interesting market opportunities. The elderly can be seen as more than just a niche market as, for instance in the United States, it controls a significant portion of the country's wealth, saving and spending power[21].

One way of using this spending power is by traveling. Tourism and leisure is an important sector in the European economy. It is especially important for elderly people as it is a sector beneficial to people's quality of life. Social activities and mobility are important aspects of quality of life for the elderly (Tacken, 1998; Banister & Bowling, 2004, in (Van den Berg, Arentze, & Timmermans, 2011)[22].

In their executive brief, IBM summarized the importance of connecting the older population, travel and accessible technology. They state that elderly travel more than any other age group, registering round 260 million trips a year and that active seniors are one of four key customer segments predicted to have a substantial effect on the airline industry during the upcoming 15 years. [23]

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[19] IJsselsteijn , W., Nap, H. H., De Kort, Y., & Poels, K. (2007). Digital game design for elderly users. *Future Play: Proc. of the 2007 Conference on Future Play. ACM Press/ Proceedings of Future Play 2007*, 17-22. doi:10.1145/1328202.1328206

[20] McMurtrey, M. E., McGaughey, R. E., Downey, J. P., & Zeltmann, S. M. (2010). *Seniors and information technology: much ado about something?* Southwest decision sciences institute conference. Retrieved from http://www.swdsi.org/swdsi2010/SW2010_Preceedings/papers/PA130.pdf

[21] Pattison, M. & Stedmon, A. Inclusive design and human factors: designing mobile phones for older users. PsychNology Journal, Volume 4, Number 3, 2006: 267-284, in Lee, K. S., and Kim, B. 2003. A study on the usability of mobile phones for the elderly. In M. Kumashino (Ed). *Aging and work* (pp. 261-169). London: Taylor and Francis.

[22] Van den Berg, P., T. Arentze, and H. Timmermans. "Estimating social travel demand of senior citizen in the Netherlands." *Journal of Transport Geography* 19 (2011): 323-331.

[23] IBM Human Ability and Accessibility Center Executive Brief
All aboard! Travel and transportation—moving ahead with accessible technology http://www-03.ibm.com/able/dwnlds/ACE00018-USEN-00_accessible.pdf

The AALIANCE Report (2010)[24] aimed at creating a comprehensive overview of the elderly, recognized mobility as an important need. Mobility needs identified are: security, safety, reassurance and comfort. The study further states that to enable personal mobility, social integration in the community, a healthy life style and quality of life are main determinants. Active aging is the aim. One way to support this is via new technologies.

In order to be adopted by elderly users, these technologies should be sufficiently accessible to the target group. Accessibility and inclusion have been on the European agenda for some time. New technologies can support and address various needs of the elderly. The focus here is travel needs.

A proportion of the elderly have disabilities. According to a New York Times article published in 2004 about business travel and dealing with disability, travelers with disabilities spend in excess of $13 billion annually on business and leisure travel [25].

Accessibility features not only benefits older people or people with a disability, but can be of benefit to the entire society. The Pew Internet & American Life Project, for example, cites usability tests highlighting the fact that when changes to Web designs are made to accommodate older users, performance also improves for younger adults. [26]

Information Technology adapted to the user can assist a wide range of people. Designing with an aim of inclusion can be beneficial to all. An environment can be conducive to disability due to lack of support. Disability through impairment can create a disadvantage (Pattison & Stedmon, 2006)[27]. Inclusive design can take into account the needs of the user. Inclusive design aims to cater for as many users as possible and incorporate diverse user requirements. It should enable rather than exclude different users

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[24] www.aaliance.eu/public/...roadmap/aaliance-aal-roadmap.pdf ambient assisted living roadmap AALIANCE The European Ambient Assisted Living Innovation Alliance
[25] "Business Travel: Hotels Learn to Deal with Disability." David Koppel, New York Times. Feb. 17, 2004. www.nytimes.com/2004/02/17/business/17disabled.html?pagewanted=2&ei=5070&en=1288d933 60014a88&ex=1188619200)
[26] IBM Human Ability and Accessibility Center Executive Brief
All aboard! Travel and transportation—moving ahead with accessible technology http://www-03.ibm.com/able/dwnlds/ACE00018-USEN-00_accessible.pdf
[27] Pattison, M. & Stedmon, A. (2006) Inclusive design and human factors: designing mobile phones for older users. PsychNology Journal, 2006 Volume 4, Number 3, pp. 267-284,

(Gym, Porter, and Case, 2000)[28] and be pragmatic, supporting different users by creating generic design solutions which suit specific needs.

Several studies have examined the travel behavior of the elderly (Collia et al., 2003; Newbold et al., 2005; Paez et al., 2006, in Van den Berg et al., 2011)[29]. As Banister and Bowling (2004 in Van den Berg et al., 2011)[30], found in their survey concerning quality of life, people with access to a vehicle and those with access to good public transport, were likely to undertake more social activities. Spatial and technical conditions can restrict mobility (Mollenkopf, et al., 1997)[31]. Technical conditions can be tackled by making ICT and internet more accessible.

A recent study estimated the social travel demand of senior citizens in the Netherlands. Van den Berg, Arentze and Timmermans (2011) [32] found that with regard to social activities (instead of work-related travel), the elderly are as mobile as younger people. High education and involvement in clubs resulted in more social trips. They also indicate that senior citizens are on average, wealthier (taking into account variability), healthier and more mobile than earlier generations (Newbold et al., 2005 [33].; Mercado & Paez, 2009 [34])

In most studies, driving was found to be the preferred mode of travel. Understanding travel demands can allow us to have an overview of present and future transportation needs and close the gap between generations.

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[28] Gym, D., Porter, M., and Case, K. (2000). Design practice and 'designing for all.
Proceeding of the International Ergonomics Association Conference, San Diego, in Pattison, M., Stedmon, A., (2006) Inclusive design and human factors: designing mobile phones for older users. Human Factors Research Group, University of Nottingham, UK , USA. PsychNology Journal, 2006 Volume 4, Number 3, pp. 267-284
[29] Van den Berg, P., T. Arentze, and H. Timmermans. "Estimating social travel demand of senior citizen in the Netherlands." *Journal of Transport Geography* 19 (2011): 323-331.
[30] Van den Berg, P., T. Arentze, and H. Timmermans. "Estimating social travel demand of senior citizen in the Netherlands." *Journal of Transport Geography* 19 (2011): 323-331.
[31] Mollenkopf, H., F. Marcellinib, I. Ruoppilac, P. Flaschenträgera, C. Gagliardib, and L. Spazzafumob. "Outdoor mobility and social relationships of IJsselsteijn , V., H. H. Nap, Y. De Kort, and K. Poels. "Digital game design for elderly users." *Future Play: Proc. of the 2007 Conference on Future Play. ACM Press/ Proceedings of Future Play 2007*, 2007: 17-22.
[32] Van den Berg, P., T. Arentze, and H. Timmermans. "Estimating social travel demand of senior citizen in the Netherlands." *Journal of Transport Geography* 19 (2011): 323-331.

[33] Newbold, K., Scott, D., Potoglou, D., Kanaroglou, P., Newbold, K., (2005). Travel behavior within Canada's older population: a cohort analysis. Journal of Transport Geography 13, 340-351.

[34] Mercado, R., Paez, A. 2009. Determinants of distance traveled with a focus on the elderly: a multilevel analysis in the Hamilton CMA, Canada. Journal of Transport Geography 17, 65-76.

This gap is also found when one looks at technology. There is a digital divide when it comes to the use of technology and the elderly. McMurtrey, McGaughey, Downey, & Zeltmann (2010)[35] state that the divide can be seen by wealth, education, ethnicity, age and country. They found that in general, compared to the younger population, elderly are less connected via technical means. Minimizing the 'digital gap' has the potential to enhance many factors in a person's life such as: social interaction, government services, e-commerce activities, healthcare and education. Increasing the use of technology can be facilitated by altering older people's misconceptions about technology, informing them about the new advances and how they work and what they have to gain from these advances.

To summarize, with the rise of the elderly population, challenges as well as opportunities arise to ensure that the elderly remain healthy and active members of society. The new generation of elderly people are a new consumer market which, as of yet, has not been aptly targeted. They have mobility needs which need to be catered for. Technology can assist the elderly and help increase accessibility and inclusion. The digital divide still remains. However, by creating ICT services with the use of inclusive design principles that are targeted to the travel needs of the elderly, healthy aging is promoted and the digital divide decreases.

3. Aging Well and New Technologies

3.1.1. Overview of the European Policies regarding Aging well and use of technologies for seniors

The EU population is steadily ageing and the impacts of these demographic changes on public services and finances have been a political concern for many years. Projections foresee that from 2012, the European working-age population will start to shrink, while the over-60 population will continue to increase by about two million people a year. By 2020 it is forecasted that around 25% of the population will be over 65.[36]

It has often been stressed that those demographic changes are one of the main challenges that the EU will have to face in the future. This has huge societal implications

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[35] McMurtrey, M. E., R. E. McGaughey, J. P. Downey, and S. M. Zeltmann. *Seniors and information technology: much ado about something?* Southwest decision sciences institute conference, 2010

[36] European Commission – Information Society and Media, Overview of the European Strategy in ICT for Ageing Well, October 2010, pp. 1-2. http://ec.europa.eu/information_society/activities/einclusion/docs/ageing/overview.pdf (last accessed:30.11.2011)

and presents an economic challenge to Europe. The ageing of the population has therefore been a political priority for many years.

3.1.2. The Policy Context

In 2002, the UN second World Assembly on Ageing adopted in Madrid the *International Action Plan on Ageing*[37]. This Action Plan recognizes that persons, as they age, should enjoy active participation in the economic, social, cultural and political life of their societies as a main development objective. Active Ageing has been defined by the World Health Organization as the "*process of optimizing opportunities for health, participation and security in order to enhance quality of life as people age.*"[38] Measures and policies have been taken in this sense at a European level to promote active ageing as a means to respond to the challenges of the demographic changes.

- In 2005, during the Hampton Court informal Summit the European Council stressed that the demographic changes are one of the main challenges that the EU will have to face in the future. The social and economic challenges associated with an aging population have received increasing attention on a policy level.

- In 2006, the European Commission published a Communication, "*The Demographic Future of Europe - From Challenges to opportunity*"[39], which exposes the EC views on this topic. The Communication identified five key policies to respond to the demographic change (Promoting demographic renewal in Europe, Promoting employment in Europe: more jobs and longer working lives of better quality; A more productive and dynamic Europe; Receiving and integrating immigrants in Europe; Sustainable public finances in Europe: guaranteeing adequate social security and equity between the generations).

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[37] United Nations Report of the Second World Assembly on Ageing, Madrid, 8-12 April 2002 - http://social.un.org/index/Ageing/Resources/MadridInternationalPlanofActiononAgeing.aspx (last accessed:30.11.2011)

[38] World Health Organisation (2002) *Ageing – A Policy Framework*, p.12 http://whqlibdoc.who.int/hq/2002/WHO_NMH_NPH_02.8.pdf (last accessed:30.11.2011)

[39] COM (2006) 571, 12 October 2006 http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2006:0571:FIN:EN:PDF (last accessed:30.11.2011)

- In 2007 the Council adopted a Resolution on the "Opportunities and challenges of demographic change in Europe: the contribution of older people to economic and social development"[40]. The Resolution emphasized the need to increase the possibilities for active participation by older people.

- In parallel, recognizing the potential of the Information and Communication Technologies (ICT) to better cope with the challenges associated with the demographic changes, the European Commission has published a set of actions to improve eAccessibility for older people. The *Action Plan on Information and Communication Technology for Ageing*[41] adopted by the European Commission in June 2007 in the framework of the *i2010 initiative,* highlights the potential of ICT to improve the quality of life of older individuals to remain healthy and live longer independently. This Action Plan addresses three areas (aging well at work, aging well in community and aging well at home) and puts in place measures to increase the adoption of ICTs by Europe's senior citizens and STIMULATE industry to produce technologies appropriate for them. The Action Plan is structured around four areas:

  - Raising awareness and establishing consensus and common strategies

  - Putting enabling conditions in place

  - Accelerating take-up of and investment in validated solutions

  - Coordinating efforts in preparing for the future through research and innovation.

- The *Digital Agenda for Europe*[42] is one of the seven flagship initiatives of the *Europe 2020 Strategy*. Its objective is to harness the potential of ICT to boost prosperity and improve people's quality of life. Among others, the Digital Agenda seeks to ensure that ICT allows more independence for disadvantaged and for persons with disabilities. The Agenda sets out measures to increase

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[40] Council Conclusions of 22 February 2007 http://register.consilium.europa.eu/pdf/en/07/st06/st06216-re01.en07.pdf (last accessed:30.11.2011)

[41] COM(2007) 332, 14 June 2007 http://eur-lex.europa.eu/smartapi/cgi/sga_doc?smartapi!celexplus!prod!DocNumber&lg=en&type_doc=COMfinal&an_doc=2007&nu_doc=332 (last accessed:30.11.2011)

[42] http://ec.europa.eu/information_society/digital-agenda/index_en.htm (last accessed:30.11.2011)

interoperability and standards in this area as well as plans action for enhancing e-skills (including measures to improve accessibility of ICT solutions) and tackle social challenges through ICT solutions (AAL JP, Standards, etc.)

- Investigating ways of helping people to participate longer in society has been mentioned as a priority that could contribute to meeting the objectives of the *Europe 2020 strategy* [43] by exploring approaches to improving older people's health and participation, thus reducing social protection costs as well as enhancing quality of life.

- In 2008, the Slovenian Presidency put forward the idea of 2012 European Year for Active Aging and Intergenerational Solidarity. In 2009, the European Commission published a Communication on how to deal with the impact of an aging population. The same year, the Council adopted Conclusions on *"Equal Opportunities for women and men: active and dignified aging"* [44] and in November 2009 the Council adopted Conclusions on *"Healthy and dignified aging"* inviting the Commission to develop awareness-raising activities to promote active aging. In this context, 2012 has been designed the *Year on Active Aging and Intergenerational Solidarity*[45].

- In 2011, the European Commission adopted a *pilot European Innovation Partnership (EIP) on Active and Healthy Aging*[46], which seeks to launch targeted activities to address the specific challenges of an aging population and independent and active aging. The Pilot was announced in the Europe 2020 flagship initiative on Innovation Union and seeks to align and optimize the use of existing tools, under a single and coherent framework by bringing together actors at all levels and sectors to build synergies.

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[43] Europe 2020: A European strategy for smart, sustainable and inclusive growth, http://europa.eu/press_room/pdf/complet_en_barroso___007_-_europe_2020_-_en_version.pdf (last accessed:30.11.2011)

[44] Council Conclusions on Equal opportunities for women and men: active and dignified ageing, 8 June 2009, http://www.consilium.europa.eu/uedocs/cms_Data/docs/pressdata/en/lsa/108375.pdf (last accessed:30.11.2011)

[45] EY 2012 website: http://ec.europa.eu/social/ey2012.jsp (last accessed:30.11.2011)

[46] http://ec.europa.eu/research/innovation-union/index_en.cfm?section=active-healthy-ageing&pg=implementation-plan (last accessed:30.11.2011)

The EIP on Active and healthy Aging will tackle three priorities:

- Innovation in support of awareness, prevention and early diagnosis

- Innovation in support of care and cure

- Innovation in support of environments for assisted/independent living while aging

- The European Commission is constantly investing more effort and steadily paying more attention to responses to the demographic changes and will continue to do so in the coming years as is demonstrated by the designation of 2012 as the Year on Active Aging and Intergenerational Solidarity, and the wish from the EU to continue to invest in this area through initiatives that will build on existing community programs.

Measures to promote active aging:

Over the years, the European Union has taken various measures to promote active aging and foster eAccessibility of ICT:

Among the policies to promote active aging in employment, the *European Employment Strategy*[47] and the *Lisbon Strategy*[48] (adopted in 2007) call for a better access to training and lifelong learning and better access to information and communication technologies by older citizens. The *European Social Fund* (ESF)[49] as well as the *Program for Employment and social solidarity*[50] (PROGRESS) support measures to promote active aging and a longer working life.

The European Union has also developed measures to respond to the demand of active participation in voluntary activities following retirement through the *Grundtvig*[51] program that finances projects supporting senior volunteering.

The *7th Framework Program for R&D*[52] supports funding of ICT solutions promoting independent living and mobility of persons.

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[47] http://ec.europa.eu/social/main.jsp?catId=101&langId=en (last accessed:30.11.2011)

[48] COM:2007:0803, http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=SPLIT_COM:2007:0803(05):FIN:en:PDF, p.9 (last accessed:30.11.2011)

[49] Website of the ESF http://ec.europa.eu/esf/ (last accessed:30.11.2011)

[50] http://ec.europa.eu/social/main.jsp?catId=327 (last accessed:30.11.2011)

[51] http://ec.europa.eu/education/lifelong-learning-programme/doc86_en.htm (last accessed:30.11.2011)

A set of measures have also been devoted to support Infrastructure and autonomous living and the adaptation of homes and local environment to be more accessible to older people with health impairments.

The Commission has issued two standardization mandates to the European standardization organization in order to develop accessibility standards for ICT and build the environment to be used in public procurement procedures.[53]

The EC has adopted an *Action Plan on urban mobility[54]* to help local, regional and national authorities achieve their goals for sustainable urban mobility.

As mentioned earlier, the EC has also adopted a Communication on "*Aging Well in the Information Society*" to promote the development of new technologies for aging well at home, in the community and at work. The European Commission developed a set of measures designed to overcome barriers that prevent older people from using Information and Communication Technology (ICT) products, services and applications. Recently, the EU has started to support the *Ambient Assisted Living Joint Program[55]* that supports R&D projects which cover technologies designed to help older people to continue to live at home. Other research projects in this area are also supported by the EU's *Seventh Framework Program for Research*, where one focus is on fostering independent living and inclusion. [56]

The *European Ambient Assisted Living Innovation Platform* (AALIANCE)[57] and *BRAID[58]*, seek to utilize the rapid developments in ICT to enhance the lives of people as they age.

3.1.3. On the development and use of (accessibility) Standards

A study recently carried out for the EU-Funded "'i-access' Project[59] on access to electronic information and lifelong learning investigates the problems encountered in

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[52] http://cordis.europa.eu/fp7/home_en.html (last accessed:30.11.2011)
[53] Commission Staff working Document –Accompanying document to the Decision of the European Parliament and of the Council on the European Year for Active Ageing (COM(2010)462) http://register.consilium.europa.eu/pdf/en/10/st13/st13216-ad01.en10.pdf (last accessed:30.11.2011)
[54] http://ec.europa.eu/transport/urban/urban_mobility/action_plan_en.htm (last accessed:30.11.2011)
[55] http://www.aal-europe.eu/ (last accessed:30.11.2011)
[56] A list of R&D Projects for older people can be found at http://ec.europa.eu/information_society/activities/einclusion/research/ageing/index_en.htm; A list of R&D eAccessibility projects can be found at http://ec.europa.eu/information_society/activities/einclusion/research/accessibility/index_en.htm (last accessed:30.11.2011)
[57] http://www.aaliance.eu/public/ (last accessed:30.11.2011)
[58] http://www.braidproject.eu/(last accessed:30.11.2011)

putting ICT accessibility policies into practices. This study suggests among others that standards compliance was one of the problems encountered.[60] This highlights the need for coherent accessibility standards in Europe.

As already mentioned, the European Commission has attempted to tackle the issue of eAccessibility standardisation by issuing two standardization mandates to the European standardization organizations in order to develop accessibility standards for ICT and to build an environment to be used in public procurement procedures. The EC Mandate M376[61] requires the three European standards Organisations (CEN, CENELEC and ETSI) to harmonise and facilitate the public procurements of accessible ICT product within Europe. Expert teams are working together at developing of a European Standard, an on-line toolkit and technical reports to assist public procurement bodies when acquiring ICT products and services.[62]

The Digital Agenda for Europe also strives for the support of actions that will encourage the development of standards for ICT.

It has been reported that establishing standards for AAL Technology would "economize on co-ordination costs, creates an integrated market with economy-of-scale advantages and would help to build trust in quality of devices and services, where error-free functioning can be critical to the individual."[63]

The AALIANCE Project has compiled a first inventory of related standards in AAL.[64]

At an international level, the International Telecommunication Union (ITU) (the United Nations specialized agency for ICTs) has recently launched an ITU-T Focus Group on Audiovisual Media Accessibility (FG AVA)[65] The main objective of this Focus Group is to address the need to make audiovisual media accessible for persons with disabilities.

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[59] http://www.european-agency.org/agency-projects/i-access(last accessed:30.11.2011)

[60] http://www.headstar.com/eablive/?p=641(last accessed:30.11.2011)

[61] http://www.ictsb.org/Working_Groups/DATSCG/Documents/M376.pdf (last accessed:30.11.2011)

[62] Reports are available at http://www.mandate376.eu/

[63] WALS Jeroen, Standards and Interoperability in GERDA GEYER, Reinhard GOEBL, Keratin ZIMMERMANN, Innovative ICT Solutions for Older Persons - A new Understanding. Proceedings of the AAL Forum 09 Vienna, ed. Österreichische Computer Gesellschaft, 2010, p. 91.

[64] http://www.aaliance.eu/public/documents/standardisation/policy-paper-on-standardisation-in-aal-february-2009 (last accessed:30.11.2011)

[65] http://www.itu.int/en/ITU-T/focusgroups/ava/Pages/default.aspx (last accessed:30.11.2011)

As a vast global undertaking, there are several international standards for Digital Television some of which specifically address accessibility issues and in particular audio-description and subtitling. The ITU has published a Telecommunications Accessibility Checklist to assist experts developing technical standards to ensure that they are taking into account the needs of those to whom accessibility to ICTs are restricted. [66]

For the web accessibility standards, the Web Accessibility Initiatives has developed a series of accessibility standards and guidelines.[67]

4. Senior and Television usage, IP and Social TV, interaction

4.1.1. Overview of the European Policies regarding Senior use of television

4.1.1.1. The policy context

As a widespread and almost universally used technology, policy makers have been interested in the accessibility of TV to avoid discrimination and exclusion. Since its beginning, requirements for accessibility have been addressed to TV providers. Step by step these requirements have been taken up by policy makers and led to according legal frameworks asking for accessibility.

Traditionally the requirements have been related to

- subtitling for hearing impaired people

- audio description for blind and visually impaired people.

Today, digital television is gradually replacing the traditional analogue television. Digital TV provides a broad spectrum of new and enhanced features that can also be seen as assistive functionalities for people with disabilities and elderly, if available in an accessible manner:

• more TV channels

• interactive features

• better quality pictures

• on-screen program guide (EPG)

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[66] http://www.itu.int/pub/T-TUT-FSTP-2006-TACL/en (last accessed:30.11.2011)
[67] http://www.w3.org/WAI/guid-tech.html (last accessed:30.11.2011)

- on-screen menus, channel information

- radio through your TV

- recordable subtitles and some audio description

- on demand TV

- services such as

- Interactive services such as a playercam for football matches/Wimbledon,

- interactive news

- Home shopping for holidays/tickets/weekly food shopping etc.

- On-line banking through television

- Internet or email services

- Downloading/playing games

- Digital Text

As pointed out by the eACCESS+ Project[68], convergence and interoperability are key prerequisites for achieving Accessibility of Digital Television and as such legislation and policies are important elements of this ongoing challenge. The current European policy on digital televisions is covered by the 2010 Audiovisual Media Services Directive (AVMSD).[69]

Specific to Accessibility, the AVMSD contains an article regarding access for the sight- and/or hearing impaired (Article 3c). The new rules aim to make audiovisual content increasingly accessible for these groups. Governments must encourage media companies under their jurisdiction to do this, e.g. by subtitling and audio description:

"The right of persons with a disability and of the elderly to participate and be integrated in the social and cultural life of the Union is inextricably linked to the provision of accessible audiovisual media services. The means to achieve accessibility should include, but need not be limited to, sign language, subtitling, audio-description and easily understandable menu navigation."

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[68] eACCESS+ website: www.eaccessplus.eu and http://hub.eaccessplus.eu/wiki/Main_Page (last accessed:30.11.2011)

[69] DIRECTIVE 2010/13/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL, 10 March 2010 http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:095:0001:0024:EN:PDF (last accessed:30.11.2011)

If accessibility criteria are met, Digital Television can act as an enabling platform for inclusion. In this context, it is worth mentioning some initiatives that have taken place in the European context:

The project *T-Seniority*[70] offers via digital TV a flexible combination of citizen-centric and personalised e-Care Services according to the user's preferred or available ICT media.

T-Seniority's main target is to create a "user-centric" integration of services, especially focusing on assistance programs -including trans-borders services- for disadvantaged social groups. By focusing mainly on the elderly, T-Seniority covers a diverse range of care needs in a wide range of service situations (home care, tele-assistance, mobile telecom services, tele-alarms, nursing services, etc.).

Vitalmind[71] is another example of a project that uses digital TV as an enabling platform. The project is dedicated to support the elderly population and therefore includes the research and development of highly cognitive brain fitness content.

The objectives of Vital Mind are outlined in three main areas:

Design and development of cognitive activities to enhance the basic elements of cognition and to improve quality of life for senior citizens.

Development of new methods for user control by detection of hand movements using vision and/or gyro and of non-voice vocal commands

Promotion of the use of a USB Flash Device (UFD) as an addition to the broadcast delivery system

The *DTV4ALL project* has already undertaken activities to facilitate the provision of access services on Digital Television across the EU.

Their current short-term roadmap stresses the fact that the necessary technical standards are available but there is a strong need of a "technical forum with regulator(s), broadcasters, manufacturers and user representatives" alongside a "user forum for prioritising access services, setting quotas and imposing quality control" in order to solve the issue of implementation guidelines.

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[70] http://tseniority.idieikon.com(last accessed:30.11.2011)
[71] www.vitalmind-project.eu(last accessed:30.11.2011)

The final project deliverables describe the recommendations on improvements of existing services, on future access service, devices and platforms, on emerging access services, as well as on the description and guidelines for implementations of the mature access services in Europe. Given the evident correlation between aging, the solutions being developed to increase accessibility of IDTV are of particular relevance for elderly people.

4.1.2. On the development and use of (accessibility) Standards for iDTV

As mentioned earlier, the International Telecommunication Union (ITU) has recently launched a new Focus Group on Audiovisual Media Accessibility (FG AVA)[72] whose main objective is to address the need to make audiovisual media accessible for persons with disabilities.

Several international standards for Digital Television (some of which specifically address accessibility issues and in particular audio-description and subtitling) are currently being used. The ITU has published a Telecommunications Accessibility Checklist to assist experts developing technical standards to ensure that they are taking into account the needs of those to whom accessibility to ICTs are restricted. [73]

In the UK, the OFCOM has published the OFCOM guideline on the provision of television access services[74]. These guidelines are often seen as the most complete guidelines developed in Europe.

Jim Slater and the RNIB Digital Accessibility Team have developed a set of guidelines[75] intended for designers of television systems. These guidelines provide general information and recommendations on accessibility issues for all types of disabilities.

4.1.3. Use of technology & Older People based on qualitative user studies and statistical databases

This section will give a brief overview of findings about the kinds of technology older adults are familiar with and the use of these technologies in their daily life. Approaches to

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[72] http://www.itu.int/en/ITU-T/focusgroups/ava/Pages/default.aspx (last accessed:30.11.2011)
[73] http://www.itu.int/pub/T-TUT-FSTP-2006-TACL/en (last accessed:30.11.2011)
[74] http://stakeholders.ofcom.org.uk/broadcasting/guidance/other-guidance/tv_access_serv/guidelines/
[33] http://www.tiresias.org/research/guidelines/television/index.htm(last accessed:30.11.2011)

collecting this data are numerous: e.g. ethnographic studies, questionnaires, focus groups, statistical databases. The section will then cover the use of new technologies.

4.1.3.1.Healthcare, technology and traveling

Ethnographic research done by Intel (2008)[76] in the United States and Europe found commonalities in the attitudes and needs of the elderly across regions. They were interested in the response to healthcare technology as one of the ways to help the elderly. People were receptive to the concept of healthcare technology if it allows them to retain a sense of control and empowerment. Four themes which were found were: the desire to stay engaged and have a sense of purpose, the needs to stay connected socially, the importance of maintaining independence, denial about aging and the challenges associated with it (González et al., 2008)[77].

Elderly people's concerns are oriented towards the present and linked to problem-solving processes. Their focus is on their health and well-being of the family. Having a sense of safety is a main need. Keeping control of their health and health prevention allows for a sense of personal security.

These aspects are important to take into consideration when looking at how one can assist the elderly when travelling. One can stipulate that maintaining a sense of control and empowerment and feeling autonomous whilst staying connected to friends and family will increase their sense of wellbeing.

4.1.4.Experience with technology

González, et al. (2008) [78] examined the needs of elderly in San Sebastian and Vienna. From a sample of 96 participants with an average age of 70 years old, they found that technologies most frequently used were the cooker and microwave (11.5%), radio (9.4%), TV (9.4%) and washing machine (8.3%) were most commonly cited. The 'most hated' technologies were the mobile phone (8.3%) and computer (5.2%). This was due to the lack of previous experience and their perceived difficulty. Aspects which were deemed

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[76] Technology for an Aging Population: Intel's Global Research Initiative www.**intel**.com/Assets/.../health-318883001.pdf; www.intel.com/healthcare/research)

[77] González, M. F., et al. *D.2.1 Report about the elderly's needs*. HERMES - Cognitive Care and Guidance for Active Aging, 2008.

[78] González, M. F., et al. *D.2.1 Report about the elderly's needs*. HERMES - Cognitive Care and Guidance for Active Aging, 2008.

important for the construction of devices were utility and simplicity. Aesthetics was found to be the least important.

Results of a focus group of people above the age of fifty, found that elderly people are reluctant about the use of technology which aims to reduce their autonomy or minimize their cognitive or functional effort as it would be perceived as dependency. If external aids are used, they need to be easier and simpler to use as the current generation is not used to technology (González, et al., 2008) [79].

González, et al. (2008) [80] also used cultural probes and found that in the daily lives of the participants questioned, technology plays a minor role. Participants tend to avoid computer based technology because it seems too complicated to use. They are used to having one appliance for one thing, rather than having tasks which are integrated into one appliance (González, et al., 2008) [81]. Goodman, Syme, and Eisma, (2003)[82] found an age-related decrease in daily technology use with the exception of telephones, televisions and microwaves.

Lutherdt, Stiller, Lienert, Spittel, Ross, Ament and Witte (2009)[83] found that in general, the elderly are not reluctant about using new technologies. In their preliminary study, 57.1 percent used electronic devices such as the telephone, mobile phone and computer, for gathering information. Similarly, older adults who have a positive attitude towards computers are more likely to use a wider range of technologies (see Czaja et al., 2006, in Caprani, Greaney & Porter, 2006)[84]. Similarly Wurm, 2000, in Schwender & Koehler, 2006)[85] state that the aversion to technology is rarely seen among older adults: 68% believe that it

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[79] González, M. F., et al. *D.2.1 Report about the elderly's needs.* HERMES - Cognitive Care and Guidance for Active Aging, 2008.

[80] González, M. F., et al. *D.2.1 Report about the elderly's needs.* HERMES - Cognitive Care and Guidance for Active Aging, 2008.

[81] González, M. F., et al. *D.2.1 Report about the elderly's needs.* HERMES - Cognitive Care and Guidance for Active Aging, 2008.

[82] Goodman, J., Syme, A., and Eisma, R. (2003). Age-old Question(naire)s, *In Proceedings of Include 2003,* Helen Hamlyn Institute, London. Retrieved June 13, 2006, from http://www.dcs.gla.ac.uk/~joy/research/2003_include_questionnaires/paper.pdf in (last accessed:30.11.2011)

[83] Lutherdt, S., Stiller, C., Lienert, K., Spittel, S., Ross, F., Ament, C., Witte, H. (2009). Design of an Assistance System for Elderly Based on Analysis of Needs and Acceptance. In Universal Access in HCI, Part I, HCII, LNCS 5614, pp. 96-105. C. Sephanides (Ed). Springer-Verlag Berlin Heidelberg.

[84] Caprani, N., Greaney, J. & Porter, N. (2006). A Review of Memory Aid Devices for an Ageing Population. PsychNology Journal, 2006 Volume 4, Number 3, pp. 205-243

[85] Schwender, C. & Koehler, C. (2006). Introducing seniors to new media technology: New ways of thinking for a new target group. Technical Communication. Vol. 53. Number 4.

is important to keep up with technological development to maintain current living standards vs 18 % who think that technology is more of a threat than to help people.

In sum, experience with technology is varied. A majority of the older population use technology in their daily lives. The use of radio and TV are most popular. Findings about the use of mobile phones and the computer are mixed. Some are open to using these newer technologies and others find it difficult to accept these technologies. A positive attitude and access to training can help in diminishing resistance towards new technologies.

4.1.5. Internet use

The elderly do face challenges when using the internet. For instance, one study found that even when older persons were able to complete most of information search tasks, they took more steps to find the information than did younger persons (Meyer, Sit, Spaulding, Mead, and Walker, 1997, in San-nga-ngam & Kurniawan, 2006)[86].

A survey on older adults' use of computers in 2003 shows that the World Wide Web and e-mail are the most commonly used applications (Goodman, Syme, and Eisma, 2003)[87]. The survey also shows that use of the web and e-mail declines with increasing age due to decline in perceptual (visual and auditory), cognitive (attention and memory) and motor (mostly haptic) capabilities (San-nga-ngam & Kurniawan, 2006)[88].

However another exploratory study examining the use of internet of users aged between fifty-five and seventy, did not see the pattern of use of older persons to be very different from that of younger persons. This is contrary to other findings about web browsing for general population (e.g. Spink, Wolfram, Jansen, and Saracevic, 2001; Tauscher, and Greenberg, 1997, in San-nga-ngam & Kurniawan, 2006)[89].

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[86] Sa-nga-ngam, P. & Kurniawan, S. (2006) An Investigation into Older People's Browsing Activities. PsychNology Journal, 2006 Volume 4, Number 3, pp. 245-265

[87] Goodman, J., Syme, A., and Eisma, R. (2003). Age-old Question(naire)s, *In Proceedings of Include 2003*, Helen Hamlyn Institute, London. Retrieved June 13, 2006, from http://www.dcs.gla.ac.uk/~joy/research/2003_include_questionnaires/paper.pdf

[88] Sa-nga-ngam, P. & Kurniawan, S. (2006) An Investigation into Older People's Browsing Activities. PsychNology Journal, 2006 Volume 4, Number 3, pp. 245-265

[89] Sa-nga-ngam, P. & Kurniawan, S. (2006) An Investigation into Older People's Browsing Activities. PsychNology Journal, 2006 Volume 4, Number 3, pp. 245-265

A recent study conducted by MyVoucherCodes in the UK notes that of the 1,341 grandparents who were aged 60 and above, 22 percent were active on social networking sites. The most popular sites being Facebook (71 %), Twitter (34 %) and Linkedin (9%). They were encouraged to join the site by younger relatives. Sixty-eight percent joined within the past twelve months[90].

The social benefits of internet use:

Internet use allows older people to socialize regardless of boundaries with mobility and physical impairment. Results of Sum, Mathews, Pourghasem, & Hughes (2008)[91] indicated that using the internet for communication and information seeking was more likely to have positive effects on the respondents social capital, loneliness and well-being. These effects were mediated by social capital. However, using internet for entertainment purposes and for finding new people were predictors of less well-being. Making the elderly aware of how they can use the internet and the positive as well as negative effect can be an effective way to reduce loneliness and increase social capital and well-being [92].

Previous research has also shown that the internet can potentially help older persons maintain their independence and improve their quality of life[93].

Older adults who were trained to use the internet reported having higher levels of social connectivity, high levels of perceived social support and on the whole, a more positive attitude towards ageing (Cody, 1999, in Sum, Mathews, Pourghasem, & Hughes, 2008) [94]

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[90] Report: British Grandparents Love Their Facebook, by Nelly Day, June 28, 2011.
http://www.eldergadget.com/report-british-grandparent-love-their-facebook/

[91] Sum, S., M. R. Mathews, M. Pourghasem, and I. Hughes. "Internet technology and social capotal: how the interet affects seniors' social capital and wellbeing." *Journal of Computer- Mediated Communication*, 2008: 202-220.

[92] Sum, S., M. R. Mathews, M. Pourghasem, and I. Hughes. "Internet technology and social capotal: how the interet affects seniors' social capital and wellbeing." *Journal of Computer- Mediated Communication*, 2008: 202-220.

[93] Helander, M. G., Landauer, T. K., & Prabhu, P. V. (1997). *Handbook of Human- Computer Interaction*. Oxford, UK: Elsevier.

[94] Sum, S., M. R. Mathews, M. Pourghasem, and I. Hughes. "Internet technology and social capotal: how the interet affects seniors' social capital and wellbeing." *Journal of Computer- Mediated Communication*, 2008: 202-220.

Even though it is performed in isolation, Lin (2001, in Sum et al., 2008) [95] states that social participation via the internet is one of the new forms of civic participation.

Similarly, Sum, Mathews, Pourghasem & Hughes' (2008) [96] found that using the internet for communication predicted a feeling of trust, neighbourhood connection and value of life. Bradley and Poppin (2008) [97] also found that if used correctly, the internet can decrease the sense of loneliness the elderly may have via an online community making virtual friends with those with similar circumstances. Satisfaction in the amount of contact with others increased significantly (Bradley & Poppen, 2003) [98].

4.1.6. TV use

The elderly dedicate a great part of their time to watching TV and listening to the radio; For instance in Spain 97% watch TV at least once a week and 71% listen to the radio (Ministero de Sanidad y Consumo, 1999, in González, et al., 2008) [99] In a study that looked at 3,092 Americans, aged 15 to 98, in survey data collected in 2006, adults over 65 reported spending three times more of their waking hours watching TV than did younger adults. Less time was spent on other leisure activities such as socializing or physical exercise (Kain, 2010) [100].

4.1.7. New forms of using the TV

4.1.7.1. Social TV

A preliminary study conducted in Portugal in 2006 examined the use of media and ICT, particularly social iTV and the way in which sociability and participation can be improved through such a system for Portuguese seniors over 65. She concluded that Social iTV and

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[95] Sum, S., M. R. Mathews, M. Pourghasem, and I. Hughes. "Internet technology and social capotal: how the interet affects seniors' social capital and wellbeing." *Journal of Computer- Mediated Communication*, 2008: 202-220.

[96] Sum, S., M. R. Mathews, M. Pourghasem, and I. Hughes. "Internet technology and social capotal: how the interet affects seniors' social capital and wellbeing." *Journal of Computer- Mediated Communication*, 2008: 202-220.

[97] Bradley, N., and W. Poppen. "Assistive technology, computers and Internet may decrease sense of iolation for homebound elderly and disabled persons." *Technology and Disability* 15 (2003): 19-25.

[98] Bradley, N., and W. Poppen. "Assistive technology, computers and Internet may decrease sense of solation for homebound elderly and disabled persons." *Technology and Disability* 15 (2003): 19-25.

[99] González, M. F., et al. *D.2.1 Report about the elderly's needs*. HERMES - Cognitive Care and Guidance for Active Aging, 2008.

[100] Kain, D. *Older adults watch more tv than younger people, enjoy it less*. june 28, 2010. http://www.eurekalert.org/pub_releases/2010-06/uoc--oaw062810.php.

social media sites have great potentials to improve elderly participation and sociability. However, for such a system to be seen as useful and satisfactory, it is pertinent to involve the elderly in the development process[101].

The *FoSIBLE Project[102,103]*, 'design of an integrated environment for social interaction', is developing a Social TV community platform for elderly people, using game technologies and smart furniture. This platform aims to increase social support via interaction. The approach integrated different multi-modal interaction techniques for an integrated Smart TV with a Social Community Solution.

4.1.7.2. Interactive TV

Internet Protocol Television is defined by the IPTV Alliance for Telecommunications Industry Solutions (ATIS) IPTV Exploratory Group on (2005) as a:

> "secure and reliable delivery to subscribers of entertainment video and related services. These services may include, for example, Live TV, Video On Demand (VOD) and Interactive TV (iTV). These services are delivered across an access agnostic, packet switched network that employs the IP protocol to transport the audio, video and control signals. In contrast to video over the public Internet, with IPTV deployments, network security and performance are tightly managed to ensure a superior entertainment experience, resulting in a compelling business environment for content providers, advertisers and customers alike." [104]

Advantages of this service are the integration of television with other IP-based services such as internet access and VoIP. A switched IP network provides the delivery of more content and functionality. However privacy is still an issue[105]. Functions which can be of use are: receiving Web service notifications while watching IPTV for incoming mail and instant messages. Caller ID, if in the possession of a digital phone is also available. You are

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[101] Quico, Seniors and the uses of media and ICT: exploring social iTV and social media sites potential to improve sociability and participation, 2008, http://uxtv2008.org/program/social-tv-workshop-papers/quico.pdf

[102] http://ercim-news.ercim.eu/en87/special/fosible-design-of-an-integrated-environment-for-social-interaction (last accessed:30.11.2011)
[103] http://FoSIBLE.eu (last accessed:30.11.2011)
[104] http://en.wikipedia.org/wiki/Alliance_for_Telecommunications_Industry_Solutions (last accessed:30.11.2011)
[105] http://en.wikipedia.org/wiki/IPTV (last accessed:30.11.2011)

in control of full functionality such as play and pause, etc. and customize your guides. One can also via a mobile phone, call and remotely record programs that are of interest[106].

4.1.8. IP TV and the elderly

The use of IP TV for elderly people has been shown in the EU project *SeniorChannel*. The SeniorChannel Project aims to "integrate innovative technologies and high added value content in order to provide elderly people with an opportunity to interact and share their knowledge, opinions and aspirations with the wider community and derive enjoyment for the experience". It also provides care professionals a new way of developing and managing elderly people's specific needs.

This is done by developing an Interactive Internet Protocol Television Channel (SENIORCHANNEL) which allows interaction and access to activities in their community such as knowledge sharing, entertainment services and workshops. Of importance is that it is low cost and easy-to-use integrated TV studio and production center which fosters community-driven broadcasting. Business opportunities are also created by accessing this new market[107].

5. Mobile Devices And Elderly

5.1.1. Mobile phones

Many older users find it difficult to use mobile phones with complex functions. One solution is to develop mobile phones with easy and convenient usability based on the user's need and applying it to universal design principles. One can thus find ways to create a mobile phone which can be used by all (Kim et al, 2007)[108]. Schwender and Koehler (2006) [109] examined the problems experiences by seniors when using mobile phones and created a method to deal with these problems. They empirically demonstrated the elderly are able to learn and use modern technology. What was

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[106] http://internetprotocoltelevision.com/ (last accessed:30.11.2011)

[107] http://innovation-labs.com/seniorchannel/ (last accessed:30.11.2011)

[108] Kim, H., Heo, J., Shim, J., Kim, M., Park, S., & Park, S. (2007). Contextual research on elderly users' needs for developing universal design mobile phone. *UAHCI'07 Proceedings of the 4th international conference on Universal access in human computer interaction: coping with diversity* (p. ???). Berlin: Springer-Verlag.

[109] Schwender, C. & Koehler, C. (2006). Introducing seniors to new media technology: New ways of thinking for a new target group. Technical Communication. Vol. 53. Number 4.

needed was: appropriate font size, clearly structured information, and less specialized computer technology or an introduction of technical terms.

ElderGadget.com is a site "which provides reviews and news about highly rated consumer electronics. By highlighting senior-friendly features, ElderGadget informs and inspires, creating a synergy between the product's technology and user." Relevant information for this report are reviews about different technology and features which make them user-friendly. For instance, there are sections looking at elder friendly features of an E-Reader and Smartphones. Noted features for E-Readers were: lightweight design, large screen, large on-screen icons, high resolution, shatter-proof screen, touch screen technology and audio capabilities[110] Features for Smartphones and examples of a device which has these features are: simple Interface (iPhone4), Lightweight (e.g. The Palm Pre Plus), Bluetooth (e.g. HTC Droid Android Phone), Large LCD Screen (e.g. HTC Touch HD), Easy to Use Buttons The BlackBerry Bold 9700) (Baumgarten, 2010)[111]

5.1.2. Tablet use

Figure 2 AssistiveTouch's On-Screen Menu

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[110] www.eldergadgets.com (last accessed:30.11.2011)
[111] Baumgarten, M. *Senior friendly guide to smartphones*. june 28, 2010. http://www.eldergadget.com/senior-friendly-guide-to-smartphones/.

Assistive Touch can help disabled people use iPhones. The new iOS 5 comes with a disability-friendly feature called AssistiveTouch. It displays a white circle at the bottom of the smartphone with motion-controlled commands such as pushing the Home button to locking the screen and changing the volume. Own commands can also be created through the Create New Gesture Screen. This can be done with a tap of their finger or a stylus which can be attached to assisted living devices (Day, 2011a)[112].

5.1.3. Examples of EU Projects catering to the needs of the elderly

Examples of other projects which are relevant to STIMULATE are:

The *Guide Project*[113] (Gentle user interfaces for elderly people) is developing a software framework that allows developers to integrate accessibility features into their application. The focus is on emerging Hybrid TV platforms and services such as connected TVs, Set-top boxes, and includes application platforms such as HBBTV and proprietary middleware solutions of TV manufacturers. Such platforms could become home media terminals for users. This could help in fostering connection via home automation, audio-visual communication or continuing education.

The *APSIS Project* [114](A secure platform for IPTV systems) aims to develop a technical solution which allows users to share personal details in an easy, controlled and safe manner on an IPTV platform. The elderly can make use of this system even if they are not familiar with or do not have access to computers or the internet.

The *OASIS Project* [115] (Open architecture for Accessible Services Integration and Standardization) aims to develop an innovative, ontology-driven, open reference architecture platform to enable and facilitate interoperability, connectivity and sharing content between different services and ontologies in application domains for the elderly. The focus is on connecting semi-automatically existing and emerging ontologies even in different fields rather than developing purpose-built and related ontologies and services. The platform abides by the standard and is open, modular, holistic and easy to use. User friendliness and accessibility are main priorities and are taken into account be a user-centered design and iterative process.

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[112] Day, N. *Assistive touch helps disabled use iPhones*. november 15, 2011a.
[113] http://www.guide-project.eu/ (last accessed:30.11.2011)
[114] http://iptv-aspis.com/index (last accessed:30.11.2011)
[115] http://www.oasis-project.eu/ (last accessed:30.11.2011)

"Applications are all integrated as a unified, dynamic service batch, managed by the OASIS Service Centre and supporting all types of mobile devices (tablet PC, PDA, smartphone, automotive device, ITV, info kiosk) and all types of environments (living labs, sheltered homes, private homes, two car demonstrators, public transport)."

The *T-Seniority Project*[116] offers via digital TV a flexible combination of citizen-centric and personalised e-Care Services according to the user's preferred or available ICT media.

T-Seniority's main target is to create a "user-centric" integration of services, especially focusing on assistance programs -including trans-borders services- for disadvantaged social groups. By focusing mainly on the elderly, T-Seniority covers a diverse range of care needs in a wide range of service situations (home care, tele-assistance, mobile telecom services, tele-alarms, nursing services, etc.).

5.1.3.1. Stakeholders according to BRAID

The *BRAID Project* (2010-2012; 'Bridging Research in Ageing and ICT Development')[117] aims to identify the needs and interests of stakeholders in 'ICT for Aging'. This is done by identifying and distinguishing appropriate coordination mechanisms for different stakeholders. Four main categories of stakeholders were identified. These are:

- *Primary stakeholders*: Private users of ICT for ageing solutions. Primary stakeholders "sell" ICT for aging solutions to clients and "buy" ICT for aging solutions from suppliers.

Senior and impaired citizens

Private caregivers, usually family members or relatives

-*Secondary Stakeholders*: Professional users of ICT for ageing solutions

Medical professionals, e.g. operating a tele-medicine center

Housing associations

Tourism industry

Public Transport

Tertiary Stakeholders

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[116] http://tseniority.idieikon.com (last accessed:30.11.2011)
[117] http://www.braidproject.eu/ (last accessed:30.11.2011)

Suppliers of ICT for ageing solutions

Research organizations: Public and private Enterprises

(Large) Enterprises with a business in tele-medicine or tele-care (e.g. Bosch, Philips, Tunstall)

Providers of the IT infrastructure: Networks and databases (Telecoms, data warehouse providers) (side example: Personal Health Records

Small and medium sized enterprises: hard- and software and/or service provision

Quaternary Stakeholders

Supporters of ICT for ageing solutions:

Policy-makers

Social (and private) insurance companies

Employers

Public administrations

Standardization organizations

Civil society organizations

Media

The following markets were identified: healthy aging and active and inclusive aging. *Healthy aging* can be divided into: continuous health surveillance, provision of care, carrying out prevention and rehabilitation, and required IT-Infrastructure. Active and inclusive aging can be divided into: independent living, practicing social change, satisfying intellectual needs (infotainment, work and hobbies), moving around, and living in a safe environment.

5.1.4. Why do some older adults choose not to use technology?

Peacock and Kunemund (2007, in McMurtrey, McGaughey, Downey, & Zeltmann, 2010)[118] examined the reasons for not using the internet. They looked at variables such as frequency, intensity, and socio-demographics. Decisions to remain offline were mainly

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[118] McMurtrey, M. E., R. E. McGaughey, J. P. Downey, and S. M. Zeltmann. *Seniors and information technology: much ado about something?* Southwest decision sciences institute conference, 2010.

based on: private access (i.e., lack of a device), motivational indifference, and deficient knowledge. Goodman, Syme, and Eisma (2003)[119] found other variables such as: feelings of frustration and confusion when using electronic devices, a lack of understanding, fear of being too old to learn how to use new devices, cost of devices, and physical difficulties impeding usage.

The difference in acceptance can also be partially explained by the variability of the group. The elderly are a heterogeneous group and thus have differing needs. This can be in terms of health, personal needs, aspirations and living conditions. Hence, the demand for ICT-based services and support will also vary across the population. Subgroups within the elderly demographic could be more relevant to specific markets, services and products. (EU Report, 2010, A2.6.1 Users, p.7) [120] . It is important to take this into consideration when designing for this group.

An explanation is that elderly have matured when computer technology was being introduced. This could reflect a cohort-specific bias (CREATE)[121]. A decline in perceptual, cognitive, and motor capabilities in the older population can also be of importance. However, notwithstanding this change in capacity, one could argue that future generations of older adults will be more accepting of technology due to prior experience and different attitudes (ibid.). In sum, adopting technology is a complex issue and is influenced by a variety of factors, including socio-demographics, attitudinal variables and cognitive abilities (ibid.).

Looking at "an overview of the European strategy in ICT for Aging Well", a presentation held in October 2010[122], the main challenges in deploying ICT technologies are: 1) the majority of elderly are not yet connected (15 % use the internet), 2) vision, hearing and dexterity problems can frustrate the user (21 % over 50 years of age), and 3) insufficient access to the market.

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[119] Goodman, J., Syme, A., and Eisma, R. (2003). Age-old Question(naire)s, *In Proceedings of Include 2003*, Helen Hamlyn Institute, London. Retrieved June 13, 2006, from
http://www.dcs.gla.ac.uk/~joy/research/2003_include_questionnaires/paper.pdf in

[120] (EU Report 2010)ICT & Ageing. European Study on Users, Markets and Technologies. Final Report January 2010. http://www.ict-ageing.eu/ict-ageing-website/wp-content/uploads/2010/D18_final_report.pdf

[121] Findings from the Centre for Research and Education on Aging and Technology Enhancement (CREATE) www.ncbi.nlm.nih.gov/pubmed/16768579

[122] An overview of the European strategy in ICT for Aging Well
ec.europa.eu/information.../docs/.../overview.pdf

Access to the market is still in the early phases. Markets do not yet sufficiently deliver the necessary ICT-enabled solutions due to:

- Barriers to innovation such as insufficient awareness of market opportunities and users' needs, lacking effective public policies to STIMULATE innovation in the public sector.

- Unclear business models for industry due to fragmented reimbursement schemes related to ICT and lacking policies for sustained investments, who pays?

- Many legal (e.g. privacy, liability) and technological barriers (e.g. interoperability, complexity, costs) remain for ICT to deliver its benefits widely.

- Fragmentation of innovation efforts, and high costs of technology development and validation, insufficient attention is given to the needs of older users when designing new technologies and services; approaches like inclusive design or design-for-all are not yet widespread.

5.1.5. Examples of New Technologies put to good Use

5.1.5.1.1. TextID can Access Health Records in an Emergency

Figure 3 Text the number on a TextID bracelet to access a patient's medical history

A new medical identification bracelet called TextID allows emergency first responders to access a victim's medical records by texting the identification number on the bracelet to a designated number that's also displayed on the bracelet.

The responders are sent two text messages within 10 seconds that include the person's name, age, contact phone number and specific medical conditions, as well as a URL that can access their extensive medical profile. The bracelets cost between $15 and $50 based on design, and can be found at many grocery and drugstores in the United States.

5.1.5.2.   India Creates $35 Tablet

Figure 4 Aakash, the new $35 tablet from India

The Indian government has a novel idea for fighting poverty: create a $10 tablet computer that could help its 1.2 billion citizens get online. Though not everything has gone as planned, the Indian government is paying $45 for a company called Datawind to develop the Android-operated tablet, which it will subsidize and offer to citizens for $35.

The tablet is named Aakash, which means "sky" in Hindi. It will feature a color touchscreen, and will contain all the basic functions associated with tablets, such as web browsing, word processing and video conferencing. (Day, 2011b)

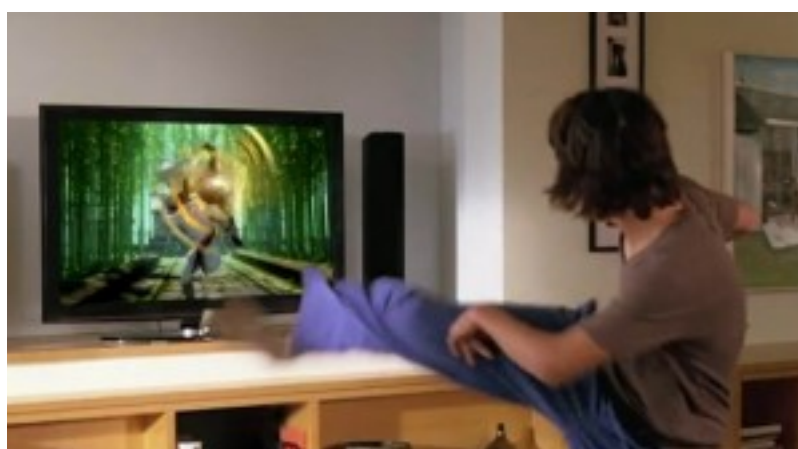### 5.1.5.3.   Study: Kinect can Assess Seniors' Risk of Falling, Getting Sick

Figure 5 The motion-sensing Kinect could monitor a senior's level of activity

Researchers at the University of Missouri say Microsoft's Kinect can determine how likely a senior is to fall or the early onset of an illness by detecting routine changes in the user's normal patterns of play. The Kinect is a motion-sensing video game system, allowing it to document subtle changes in a senior's ability to walk, bend or move in a variety of other ways.

Using the Kinect's data, researchers believe that over time they could determine a senior's risk of falling. They are also confident that a new Doppler radar system MU is developing could one day detect an actual fall and alert caretakers or family members that an injury has occurred. (Day, 2011c)

5.1.5.4. UCLA Researchers Create Flexible OLED Display
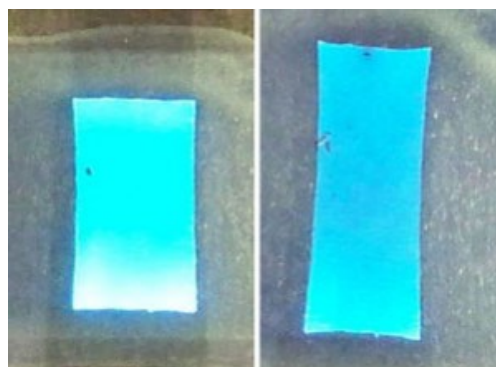
Figure 6 The first fully flexible OLED display

UCLA engineering researchers have created the first fully stretchable OLED display. While this news may seem a little too scientific for our general reading audience, it could actually mean big news for the future of electronic devices.

Think about it. If an OLED display can bend and flex, then it could be rolled up and stored in our pockets or even implanted in our skin for medical purposes. Can you imagine what our smartphones, tablets or even TVs could look like if they could be expanded, shrunk or otherwise altered thanks to their flexibility?

While we may still be a little ways off from seeing the benefits of this new technology, it's definitely a start. UCLA's new OLED can currently stretch by as much as 45 percent.

Check out the cool video below to see this OLED flex its muscles. (Day, 2011d)

5.1.5.5.Sacramento Seniors Utilizing e-Readers, e-Library Books

Figure 7 Spectrum Online

Spectrum Online recently ran a story about the Sacramento Public Library and its enthusiastic patrons, many of which are seniors. Now these seniors aren't up in arms about the library's newest paperback or extended hours.

Instead, they're interested in trading those bulky published books for lightweight e-readers, and one librarian has offered to show them how to use these devices. Megan Wong, one of the Sacramento library's tech librarians, has created an appointment schedule for Wednesdays during which seniors can bring in their e-readers and she will show them how to use them and how to download library e-books onto them.

The story notes that e-readers have become popular with seniors because they are "very easy to use," "compact" and "easy on the eyesight," among other reasons. Wong noted that e-readers were ideal for seniors because the devices are much easier to hold than traditional books, and can store thousands of titles.

(Day, Sacramento seniors utilizing e-readers, e-library books. 2011e)

6. ENAT and Accessibility Guidelines and Relevancy for STIMULATE Interfaces

6.1.1. ENAT "Code of Good Conduct" in context with the STIMULATE project

The ENAT Code of Good Conduct is a commitment label and certification scheme for public and private enterprises and organisations, recognising their efforts to promote accessible travel and tourism.

It is the first and only international labelling scheme for the promotion of ethical business standards in Accessible Tourism for All.

The Code has 8 guiding principles which, if followed, can help to make travel and tourism accessible for all visitors, in particular, those who experience access difficulties due to disability, long-standing health problems or age-related conditions.

The Code is primarily intended for public or private enterprises that directly serve tourists. It can also be used by organisations involved in tourism policy-making, planning, design and management of tourist venues, production or management of facilities and equipment, tourism marketing, higher education, staff training, travel and tour services, travel bookings, etc.

The ENAT Code of Good Conduct is both a European and international accessible tourism label and certification scheme and is available to ENAT members in all countries of the world.

Following closely the ENAT guidelines, STIMULATE formulates principles for accessibility guidelines

6.1.2. STIMULATE principles for accessibility guidelines

The principles are based on the ENAT Code of Good Conduct, taking into account ethical business standards for customer service

Recognition of equal rights STIMULATE recognises that older people have the right to enjoy tourism, whatever their background or abilities are. STIMULATE recognises and affirms

the rights of disabled people to be included in tourism and work to provide them with equal opportunities to enjoy this right.

(The United Nations Convention on the Rights of People with Disabilities was signed by 139 Member States in 2006.(1) It establishes, inter alia the principle of equal rights to participate in leisure activities -article 30)

Personal attention: STIMULATE platform welcomes all customers and makes it a priority to meet their individual needs.

be   Wherever possible, the requirements of tourists with particular access needs should met within the general provisions for information, transport, accommodation and all kinds of services. Where an alternative system or service is established in order to respond to users' and clients' functional requirements, this must be of equal quality and shall not entail a greater cost to users or clients.

Removing and preventing access barriers: STIMULATE is committed to planning and carrying out improvements to the products, services and information, using a 'design-for-all' approach, in order to remove or minimise access barriers for older people and contribute to sustainable and accessible tourism for older people.

Improving knowledge and competences: STIMULATE follows recognised "good practices" and guidance for tourism accessibility provided by ENAT.

Monitoring: STIMULATE ensures that customer services are monitored.

The accessibility of the platform and the facilities should be continually assessed – also through the use of customer feedback.

6.1.3. Open Platforms for AAL and Accessibility Guidelines for STIMULATE

The following open source platforms and their protocols might be of interest for technical solutions of the project:

OSAmI-Commons[123], AAS-Platform[124], universAAL[125], openURC[126],andago[127], LinkSmart[128]

Moreover it is important to include several accessibility guidelines for the technical testing of STIMULATE PLATFORM, the tests should include:

WAI-Age Guidelines[129], like WCAG Guidelines specifically designed for older users: For dynamic Content, WAI-ARIA[130].

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[123] OsAMI website: http://www.osami-commons.org/ (last accessed:30.11.2011)

[124] AAS Platform: http://www.aas-platform.com/ (last accessed:30.11.2011)

[125] UniversAAL: http://www.universaal.org/ (last accessed:30.11.2011)
[126] OpenURC: http://www.openurc.org/ (last accessed:30.11.2011)
[127] Andago: http://www.andago.com/areas_de_negocio/salud-bienestar/oferta/ (last accessed:30.11.2011)
[128] http://sourceforge.net/projects/linksmart/ by http://www.hydramiddleware.eu/ (last accessed:30.11.2011)
[129] WAI-AGE: http://www.w3.org/WAI/WAI-AGE/comparative.html (last accessed:30.11.2011)
[130] http://www.w3.org/WAI/intro/aria.php (last accessed:30.11.2011)

User Studies

7.   USER Requirements, Needs and Values for STIMULATE

This deliverable aims to provide a preliminary formulation of needs and priorities of seniors in their travel planning and conduction. The studies are designed by following qualitative research and data collection aprroaches in order to extend the knowledge from the literature and better realte it to STIMULATE.

By following this type of research, we aim to cover all possible aspects related to adoption, values as well as practical needs that can effect the success of STIMULATE Proposals. In general a qualitative methodology in combination with experimetal studies is followed during this process. The results are informed by conducted literature surveys, and will alter be extended by multiple analysis of experts. The following studies are conducted to cover the requirements of STIMULATE Proposal:

Literature Surveys: The literature surveys cover the travel statistics and needs of seniors, state of the art literature on travel, mobility, television and mobile device usage in related context.*Expert Workshops:* Expert workshops cover travel preferences of older people and relevant disability context.*Focus Groups* cover general motivations for travel and relevant needs, as well as interaction possibilities. *Self-Prototyping:* self prototyping covers the possible physical problems, that would go beyond accessibility and usability requirements.

From the initial literature survey a general survey was created, where initial needs of travel and mobility were asked. Next, the aspects of different stakeholders and different countries were collected and an outline for expert workshops is created. Parallel to this a self-prototyping study and participant and non-participant observations were conducted in order to see the visual constructs of senior tourist in the city. Expert workshops covered various aspects of different types of senior travel. After this in Austria and France several Focus groups were conducted to get better insights to possible help and motivation points where a system like STIMULATE can help. Moreover for the interaction requirements through mobile and television, existing systems were analyzed.

7.1.1. Ethical Issues for STIMULATE User Involvement and Observational Studies

In last 10 years various research streams in European Union (as well as in globe) have concentrated on the development of systems that are defined as assisting systems, most

of the time with a specific emphasis to older users, such as Ambient Assited Living[131] or ICT and Aging Calls from European Union Funding agencies. The projects and systems that are funded as a part of these calls usually include various type of studies that requires ordinary people's involvement. These studies need a proper guideline for the ethical aspects of the projects, as the involved people's lives are observed, documented and analyzed. Moreover in lab and field environments, at the later steps of the projects, the systems collect data from users, here also it is important to follow some ethical aspects that are already defined by ethical commissions and categorized under country law or related documents.

STIMULATE project also follow several ethical documents during its relation with potential users and other involved persons as well as keeping data.

The concerns include (summarized from AAL Ethical Recommendatins[132] in relation to STIMULATE Project):

- ethical aspects that are from usage in everyday life

- issues of "responsibility, autonomy, dependence and care, data protection"

- consequences of monitoring

- requirements for technological from an ethical perspective

In order to deal with those questions in a complex collaborative project, STIMULATE System follows the main rules that are defined by Bioethic Commision in a white paper from 2009 as follows[133]

"Responsibility

Autonomy,Dependence and Care

Socio-Ethical Issues

Data Protection and Invasion of Privacy

Implementation in the Living Environment of Older People"(pp:33-38)

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[131] www.aal-europe.eu (last accessed:30.11.2011)
[132] Assistive Technologien. Ethische Aspekte der Entwicklung und des Einsatzes Assistiver Technologien unter Berücksichtigung älterer Menschen, Stellungnahme, 13. Juli 2009
[133] Assistive Technologien. Ethische Aspekte der Entwicklung und des Einsatzes Assistiver Technologien unter Berücksichtigung älterer Menschen, Stellungnahme, 13. Juli 2009

The relevance of these points that are defined by bioethics commision to STIMULATE system can be commented in following points:

Responsibility aspect in STIMULATE project may include issues like:

STIMULATE system interfaces should behave as correct as possible.

STIMULATE system's stored data shouln't allow other people make decisions for the name of the owner of this data

Autonomy, Dependence and Care

STIMULATE shouldn't change the automomus role of the older person in making decisions

STIMULATE system can support the persons for easier decision making

STIMULATE system should be fully transparent on data distribution

STIMULATE sytem should support users with relevant feedback, on the points where some non-autonomus decisions are to be made by the system and should take confirmation for this

STIMULATE system shouldn't create any dependency to a partical travel agency or similar by excluding information, or through misinforming.

Socio-ethical Issues

STIMULATE should equally accessible to all older users independent of costs, internet usage or similar.

STIMULATE system shouldn't support of explicitly replacing human help, however it can support the travel personall.

On all social interactions that are conducted during the project, informed consents are to be used.

Data Protection and Invasion of Privacy

STIMULATE prevents unathorised access to any collected data and information.

Older users are to be asked for permission with clear questions, and after being informed with examples to possible consequences.

Implementation in the Living Environment of Older People

With help of a guide STIMULATE user is supported in configuring and getting along well with the STIMULATE sytem at home or through mobile usage

Prior to any real implementation, STIMULATE system will be tested by experts, who wouldn't be effected badly in case of system fails.

In the duration of STIMULATE Project, both France and Austrian partners (where user studies take place), are guaranteeing to consider existing ethical requirements in their interation with people. Moreover, it is clear that all the partners of the project agreed to follow the known national and European level lagal requirements during their participation, wherever it is needed.

The detailed descriptions and references can be followed in next part.

7.1.2. Detailed Information and references to Ethical Issues that applies to STIMULATE Project

Ethical rules and regulations are often difficult to set when the product or system they concern is only at its earliest inception phase. Even if a very comprehensive and solid ethical framework, relative to products and their trials, already exists in Europe and in the various Member States –a framework described hereunder, within which STIMULATE's operations will take place- a number of specific ethical issues, particular to the project, need to be considered. Such ethical issues in deed are those intimately related to the project's nature and to its population of testers, all of them different.

Due to this, the present document is organised as a reminder of:

1. Discussion on the nature of STIMULATE's resulting product and the consequence on the trial studies

2. International texts and European Laws and Directives relative to trials

3. National laws and regulations in France where STIMULATE's resulting product will be specified and tested by potential users

4. Good ethical behaviour, particularly of social concern, to keep in mind during the project and once it is over.

7.1.2.1. On the nature of STIMULATE's resulting product(s)

Since the outcomes of STIMULATE cannot be considered, strictly speaking, as "medical devices", according to the general definition given by the ISO standard 13485 (ISO 13485:2003 Medical devices -- Quality management systems -- Requirements for regulatory purposes, a synthetic summary of the definition is available from: http://www.praxiom.com/iso-13485-definitions.htm -ISO standards explained in simple English); the outline of the project study will not be that of a formal clinical trial as this would be the case with a product offering a heavier medical content. The products/systems resulting from the STIMULATE project will not be considered as a medical device but rather as a support to independent mobility and personal autonomy.

However this classification -or rather non-classification as no specific category or product status are designated so far for the products resulting from STIMULATE- does not exonerate from respecting the existing laws, regulations and rules of conduct and good practices prevailing in trials by potential users.

Please note that although several regulatory references and information relative to "clinical trials" or "clinical studies" are made in the present document here, the STIMULATE project trials are not medical clinical trials stricto sensu and therefore do not require any specific actions to comply with the regulations for clinical trials in accordance local country legislation. All references to clinical trial regulation and legislation in this document have been included only to maintain the highest level of probity of the study and to ensure that the testing entities will adhere as closely as possible to those standards to ensure quality of the data collected and to provide for all appropriate protections of individuals (and their personal data) participating in the trials.

7.1.2.2. International Texts and European Laws and Directives relative to trials

1947 & 1948 (UNO) – Nuremberg Code

Further to the Nuremberg trials this Code became the first major international document providing directives concerning research ethics. It made "informed consent" compulsory in the framework of clinical research. Consent is voluntary only if:

- participants have the capacity to consent ;

- participants are free from any constraint and understand the risks and benefits which are implied.

The Nuremberg Code also stipulates that researchers must

- minimise risks and damages,

- make sure that risks don't exceed significantly potential benefits,

- use appropriate study patterns and,

- guarantee that patients are free to quit the study at any time..

1964 –Helsinki Declaration 1964 (and further revisions)

The 18th World Medical Assembly has adopted 12 principles designed to provide MDs with directives on ethical problems posed by biomedical research. It has emphasised the distinction between healthcare and and research. These directives have been revised in further meetings:

- 1975 (Tokyo, Japan),

- 1983 (Venice, Italy),

- 1989 (HongKong),

- 1996 (Somerset West, RSA) and

- 2000 (Edinburgh, Scotland),

- clarification notes were added in 2002 (Washington) and 2004 (Tokyo).

1996 –ICH directive on Good Clinical Practice [Bonnes Pratiques Cliniques (BPC)]

Several other countries such as Australia, Canada and EFTA member states have adopted these recommendations.

The BPC « Good Clinical Practice » guidelines document lists the principles and methods to apply for protecting subjects participating in clinical trials.

7.1.2.3. European Laws, Directives and Texts relative to Trials

The European Laws and Directives relative to trials considered for the STIMULATE project are the following; they include directives and legally enforceable instruments at a European level:

- Charter of Fundamental Rights of the European Union

- The European Human Rights Convention

- The European Commission's Seventh Framework Programme (2007-2013) also contains an annex providing guidance to researchers in identifying ethical issues that might arise from their ICT research. (Annex 5 - Ethical Guidelines for Undertaking ICT Research in FP7).

Charter of Fundamental Rights of the European Union

The European Union Charter of Fundamental Rights defines all civil, political, economic and social rights of European citizens and all persons resident in the European Union. The principles covered include dignity, freedoms, equality, solidarity, citizens' rights and justice.

The European Human Rights Convention

This document was the first major treaty of the Council of Europe, and outlines basic human rights, liberties and freedoms for the citizens of European countries.

The following Articles in the European Human Rights Convention are applicable to the STIMULATE project studies and proceedings:

Section I: Rights and freedoms

Article 8: Right to respect for private and family life

1. Everyone has the right to respect for his private and family life, his home and his correspondence.

2. There shall be no interference by a public authority with the exercise of this right except such as is in accordance with the law and is necessary in a democratic society in the interests of national security, public safety or the economic well-being of the country,

for the prevention of disorder or crime, for the protection of health or morals, or for the protection of the rights and freedoms of others.

Annex 5 - Ethical Guidelines for Undertaking ICT Research in FP7 (extracts):

The Annex includes guidelines for a responsible approach to research and privacy, as well as informed consent. The following guidelines will inform the STIMULATE studies and proceedings:

2. Conduct of ICT Research

2.2 Privacy and informed consent

The right to privacy and data protection is a fundamental right and therefore applicable to ICT research.

Researchers must be aware that volunteers have the right to remain anonymous. Researchers must comply with Data Protection legislation in the Member State where the research will be carried out regarding ICT research data that relates to volunteers.

Informed consent is required whenever ICT research involves volunteers in interviews, behavioural observation, invasive and non-invasive experimentation, and accessing personal data records. The purpose of informed consent is to empower the individual to make a voluntary informed decision about whether or not to participate in the research based on knowledge of the purpose, procedures and outcomes of the research.

Before consent is sought, information must be given specifying the alternatives, risks, and benefits for those involved in a way they understand. When such information has been given, free and informed consent must be obtained. Depending on the nature of the research, different consent procedures may be used. Special consideration must be given when volunteers have reduced autonomy or are vulnerable.

The majority of European citizens view personal privacy as an important issue. Research, for example, on RFID and ICT for healthcare, is likely to raise privacy issues. Therefore, researchers must ensure that the manner in which research outcomes are reported does not contravene the right to privacy and data protection. Furthermore, researchers must carefully evaluate and report the personal privacy implications of the intended use or

potential use of the research outcomes. Wherever possible, they must ensure that research outcomes do not contravene these fundamental rights.

3. Specific guidance in some sensitive areas which may be taken into account by the entire staff working on the STIMULATE project, should using implants, and not just smart mobile devices, be considered:

3.1 ICT implants and wearable computing

• ICT implants should only be developed if the objective cannot be achieved by less-invasive methods such as wearable computing devices and RFID tags.

• To the extent that an individual, via an ICT implant or wearable computing device, becomes part of an ICT network, the operation of this whole network will need to respect privacy and data protection requirements.

• ICT implants in healthcare are, in general, acceptable when the objective is saving lives, restoring health, or improving the quality of life. They should be treated in the same way as drugs and medical devices.

• ICT implants to enhance human capabilities should only be developed: to bring individuals into the "normal" range for the population, if they so wish and give their informed consent; or to improve health prospects such as enhancing the immune system. Their use should be based on need, rather than economic resources or social position.

• ICT implants or wearable computing devices must not: allow individuals to be located on a permanent and/or occasional basis, without the individual's prior knowledge and consent; allow information to be changed remotely without the individual's prior knowledge and consent; be used to support any kind of discrimination; be used to manipulate mental functions or change personal identity, memory, self-perception, perception of others; be used to enhance capabilities in order to dominate others, or enable remote control over the will of other people.

• ICT implants should not be developed to influence future generations, either biologically or culturally.

• ICT implants should be developed to be removed easily.

It should be added as a conclusion here that

it is essential keeping on explaining the objectives, the technology, the implementations, the potential benefits but also the possible drawbacks to those persons voluntary for testing the system

persons voluntary for testing the system may withdraw from the experience at any time, without having to provide explanations, but by informing clearly about this withdrawal.

<p style="text-align:center">7.1.2.4.   Laws and Texts relative to Privacy and Protection of Personal Data[134]</p>

1.3.2 Data protection

The responsible management of sensitive personal data is more than an undisputed objective of the STIMULATE project; it constitutes an imperative obligation of any ICT solution that deals with the mental, physical and overall health condition of users. This need has been acknowledged by the consortium and the undertaking of that obligation will be informed by the national and legislative data protection directives as discussed in this document, a thorough review of the European and Member States' legislation that should and will affect the technical and operational specifications of the STIMULATE project studies and service.

The National Data Protection Commissioners throughout the European Union provide information, advice and guidance on data. Contact details for the data protection authorities of the Member States can be found on the European Commission website.

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[134] Official Journal of the European Communities, The Charter of Fundamental Rights of the European Union (2000/C 364/01), 18 December 2000. http://www.europarl.europa.eu/charter/pdf/text_en.pdf
European Court of Human Rights, Convention for the Protection of Human Rights and Fundamental Freedoms, 4 November 1950. http://conventions.coe.int/treaty/en/Treaties/Html/005.htm (last accessed:30.11.2011)
Official Journal of the European Union, Decision No. 1982/2006/EC of the European Parliament and of the Council, 18 December 2006. http://eur-lex.europa.eu/LexUriServ/site/en/oj/2006/l_412/l_41220061230en00010041.pdf (last accessed:30.11.2011)
Annex to the FP7 ICT Research Guide for Applicants / Annex 5 - Ethical Guidelines for Undertaking ICT Research in FP7).
Data Protection Working Party:
http://www.edps.europa.eu/EDPSWEB/edps/lang/en/pid/1 (last accessed:30.11.2011)
http://ec.europa.eu/justice_home/fsj/privacy/workinggroup/index_en.htm (last accessed:30.11.2011)

Legislative documents, main proposals and Community acts regarding data protection in Europe include the following:

Directive 95/46/EC

The Data Protection Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 serves as the reference text for data protection issues throughout Europe. The guidance established in this Directive serve to protect the privacy of individuals in regards to the processing of their personal data and the movement of such data. The Directive sets strict limits on the collection and use of personal data and also requires that each Member State set up an independent national body responsible for the protection of these data.

Each country participating in the STIMULATE project should therefore identify its own such body.

The Directive focuses on several key principles concerning the use of and access to personal data with which all member states must comply. Any organisation processing or holding personal data must comply with the eight enforceable principles of good practice in Section 1, as follows:

Article 6

1. Member States shall provide that personal data must be:

(a) processed fairly and lawfully;

(b) collected for specified, explicit and legitimate purposes and not further processed in a way incompatible with those purposes. Further processing of data for historical, statistical or scientific purposes shall not be considered as incompatible provided that Member States provide appropriate safeguards;

(c) adequate, relevant and not excessive in relation to the purposes for which they are collected and/or further processed;

(d) accurate and, where necessary, kept up to date; every reasonable step must be taken to ensure that data which are inaccurate or incomplete, having regard to the purposes for which they were collected or for which they are further processed, are erased or rectified;

(e) kept in a form which permits identification of data subjects for no longer than is necessary for the purposes for which the data were collected or for which they are further processed. Member States shall lay down appropriate safeguards for personal data stored for longer periods for historical, statistical or scientific use.

The guidelines in this Directive are related to the following topics:

- General Rules on the Lawfulness of the Processing of Personal Data

- Principles Relating to Data Quality

- Criteria for Making Data Processing Legitimate

- Special Categories of Processing

- Information to be Given to the Data Subject

- The Data Subject's Right of Access to Data

- Exemptions and Restrictions

- The Data Subject's Right to Object

- Confidentiality and Security of Processing

- Notification

- Judicial Remedies, Liability and Sanctions

- Transfer of Personal Data to Third Countries

- Codes of Conduct

- Supervisory Authority and Working Party on the Protection of Individuals with Regard to the Processing of Personal Data

- Community Implementing Measures

Directive 2000/C 364/01

According to the Charter of Fundamental Rights of the European Union (2000/C 364/01), the protection of personal data is a fundamental right:

1. Everyone has the right to the protection of personal data concerning him or her.

2. Such data must be processed fairly for specified purposes and on the basis of the consent of the person concerned or some other legitimate basis laid down by law. Everyone has the right of access to data which has been collected concerning him or her, and the right to have it rectified.

3. Compliance with these rules shall be subject to control by an independent authority.

Directive 2002/58/EC

Directive 2002/58/EC of the European Parliament and of the Council of 12 July 2002 concerning the processing of personal data and the protection of privacy in the electronic communications sector (Directive on privacy and electronic communications). This Privacy Directive updated the Telecommunications Data Protection Directive (Directive 97/66/EC – see below) in the light of new technologies ensuring that the privacy rules which applied to phone and fax services also applied to e-mail and use of the Internet.

Directive 97/66/EC

Directive 97/66/EC of the European Parliament and of the Council of 15 December 1997 concerns the processing of personal data and the protection of privacy in the telecommunications sector. This Directive was updated with Directive 2002/58/EC.

Directive 2006/24/EC

Directive 2006/24/EC of the European Parliament and of the Council of 15 March 2006 on the retention of data generated or processed in connection with the provision of publicly available electronic communications services or of public communications networks and amending Directive 2002/58/EC.

This Directive pertains to data generated or processed as a consequence of a communication or a communication service.

Regulation (EC) 45/2001

Regulation (EC) 45/2001 of the European Parliament and of the Council of 18. December 2000 on the protection of individuals with regard to the processing of personal data by the Community institutions and bodies and on the free movement of such data.

The persons to be protected in this Directive are those whose personal data are processed by Community institutions or bodies in any context whatsoever, for example because they are employed by those institutions or bodies.

This Directive is based on two main principles:

1. The responsible data controller needs to respect a number of obligations. For instance, personal data can only be processed for a specific and legitimate reason which must be stated when the data are collected.

2. The person whose data are processed - the data subject - enjoys a number of enforceable rights. This includes, for instance, the right to be informed about the processing and the right to correct data.

In addition to the Directives from the European Commission regarding privacy and data protection, there are several bodies that have produced important documents. Among these are the following:

European Data Protection Supervisor (EDPS)

According to the EDPS web site:

"The EDPS is an independent supervisory authority devoted to protecting personal data and privacy and promoting good practice in the EU institutions and bodies. It does so by:

- monitoring the EU administration's processing of personal data;

- advising on policies and legislation that affect privacy; and

- co-operating with similar authorities to ensure consistent data protection."

The EDPS was established by the European Parliament and Council to ensure that the EU institutions and bodies process personal data of EU staff and others lawfully. The EDPS oversees Regulation (EC) 45/2001 on data protection.

The EDPS states that every institution or body should have an internal Data Protection Officer who is responsible for keeping a register of processing operations and notifying systems with specific risks to the EDPS. Further, the EDPS works in cooperation with the Data Protection Authorities from Member States to promote consistent data protection throughout Europe. The Article 29 Data Protection Working Party (discussed below) is that platform which promotes uniform application of the general principles of the Directives in all Member States through the co-operation between Data Protection supervisory authorities.

Article 29 Data Protection Working Party

The central platform for cooperation amongst all national data protection supervisory authorities is the Article 29 Working Party which was established by Article 29 of Directive 95/46/EC. All data protection authorities from the Member States work under the Article 29 Data Protection Working Party with a representative from the European Commission to consider and provide opinions on various data protection issues, including the provision of advice.

The Working Party was set up to achieve several primary objectives :

- To provide expert opinion from member state level to the Commission on questions of data protection.

• To promote the uniform application of the general principles of the Directives in all Member States through co-operation between data protection supervisory authorities.

• To advise the Commission on any Community measures affecting the rights and freedoms of natural persons with regard to the processing of personal data and privacy.

• To make recommendations to the public at large, and in particular to Community institutions on matters relating to the protection of persons with regard to the processing of personal data and privacy in the European Community.

The Article 29 Working Party has also created several documents and rulings relative to data protection that **may** apply to the STIMULATE project. For example:

• Article 29 Data Protection Working Party, Opinion on the use of location data with a view to providing value-added services, 2130/05/EN, WP 115, adopted on 25 November 2005.

• Article 29 Data Protection Working Party, Working document on the processing of personal data relating to health in electronic health records (EHR), 00323/07/EN, WP 131, adopted on 15 February 2007.

• Article 29 Data Protection Working Party, Working document on data protection issues related to RFID technology, 10107/05/EN, WP 105, adopted on 19 January, 2005.

7.1.2.5. National laws and regulations in France

Trials

In France where STIMULATE's resulting product(s) which, again, is(are) not medical devices, will be specified and tested by potential users, the following texts may apply.

In France, trials are strictly controlled by law. French law embodies and improves international by laws. Any public or private clinical trial has to undergo a preliminary authorisation and is submitted to the so called "Huriet-Sérusclat law" of 1988, which has been in force since 01 January 1991.

The 09 August 2004 law relative to public health policy which incorporates the new european directive on clinical trials in the french law further reinforces the protection measures for persons participating in biomedical research.

Agence Française de Sécurité Sanitaire des Produits de Santé (AFSSAPS) make sure that patients give their "informed consent" and AFSSAPS may initiate investigations during a protocole via an independant 'Comité d'éthique' (committee on Ethics). BPCs (bonnes pratiques cliniques) have to be respected in addition to the legal framework.

A participant may leave a clinical trial at any time. All the participant has to do is inform the research team about her/his withdrawal from the trial, and give the reasons she/he has for doing so.

7.1.2.6.   About BPCs (Good Clinical Practice).

There are numerous guides on BPCs. For example, European Directive (91/507/EEC) defines BPCs drugs trials in the EU. The « Guideline for Good Clinical Practice » is an international standard of ethical and scientific quality for elaborating, conducting, documenting (incl data capture) and publishing trials that imply the participation of human persons.

This guide has been adopted on 01 May 1996 by the ICH (International Conference on Harmonisation of technical requirements for registration of pharmaceuticals for human use).

Trial Approval Process

In France, trials are strictly controlled by law. Any public or private clinical trial has to undergo a preliminary authorisation and is submitted to the so called "Huriet-Sérusclat law" of 1988, which has been in force since 01 January 1991. **But, again, STIMULATE's end results not being medical devices but rather a support for mobility/autonomy does not fall under the 1988's "Huriet-Sérusclat law".**

However, before possible business plans are designed, **Agence Française de Sécurité Sanitaire des Produits de Santé (AFSSAPS)** might have to be approached since, depending on the actual outcome of the resulting 'products', may have their word to say before the product/system is fully released to the market.

7.1.2.7. Trial Data Protection

Trial data protection is paramount in any clinical trial and patient anonymity must be guaranteed. Only the "front end clinician" may know the human subject's identity, and all data must be "anonymised."

In addition to the data protection standards as required by European legislation and listed in the beginning of this document, the following guidelines will be followed during the STIMULATE trial to comply with specific requirements as established by the French legal directives discussed above:

• Every STIMULATE trial participant may contact the CNIL to receive assistance in the exercise of his rights (particularly if his right of access has been denied).

• Every STIMULATE trial participant must be informed about the identity of the data controller and their representative, the purposes of processing; whether the data subject has the obligation to provide the information and the consequences of not doing so; the possible recipients of the data.

• Any participant may leave the trial at any time. All the participant has to do is inform the research team about her/his withdrawal from the trial, and give the reasons she/he has for doing so.

• The transfer of data to other states depends on the level of data protection in that state, and will require authorization from the DPA (Data Protection Agency).

• The French Data Protection Act provides that personal data cannot be stored over a certain period of time. Therefore, the French Data Protection Agency ensures that the

storage time reflected in the declaration will not be disproportionate to the purpose of the database.

French Data Protection Agency

National Data Protection Commissioner of France:

Commission Nationale de l'Informatique et des Libertés (CNiL)

8, rue Vivienne, CS 30223

F-75002 Paris, CEDEX 02

Tel. +33 (0) 1 53 73 22 22

Fax +33 (0) 1 53 73 22 00

Website: http://www.cnil.fr/

7.1.2.8.   Good ethical behaviour

Ethical guidelines and practices particularly of social concern, to keep in mind during the project and once it is over

Distinguishing between morals and rights, staff working on STIMULATE may also want to adopt a no-nonsense approach to ethical behaviour and therefore concentrate also on common sense social concern. Such considerations add onto laws. As learnt from previous projects, legal texts take common sense for granted; nevertheless, various generations from various cultures may not behave similarly, especially as variations as to what constitutes "public" and "private" space, or financial or economic capacity of participants to trials for example, may prevail. The idea here is to recommend acting positively, with great humanity as well as discretion, with concern and empathy for the elderly (and possibly impaired) persons, without falling in classical social traps, flattery, sycophancy, etc. . Without giving precise indications as to how to behave or act, it is recommended that great attention and intellectual integrity is put on the conditions (economic, intellectual, cultural, emotional, etc.) of the users or 'participants' involved in

the trials. For example, making believe that the resulting product will be made available soon at affordable prices to a trial participant, let alone the broad public, is typically one thing, among hundreds, to avoid doing.

Such behaviour should be kept also during while exiting the project.

8. Inclusion criteria and informed Consents

The inclusion criteria for expert groups were to be a senior's travel expert with relevant experience. The pre-study survey was conducted mainly among technology affine travellers. The inclusion criteria for focus groups in Austria were being mobile or partly-mobile senior person, in France, both routine-traveller seniors and non-traveler lower income seniors are covered. The expert analysis and self-prototyping studies were conducted by experience designers. For informed consent example see:Annexes. For details of inclusion criteria, see partner documents.

9. Methodology and Procedures

User Studies

STIMULATE Project follows a people centered design approach during the project, which will be updated in an iterative way according to the gathered information until a framework for the mobility needs of older people is completed and validated by following qualitative approach and validity requirements. This process is going to be followed until all aspects relevant to STIMULATE and potential users of STIMULATE are covered.

The people centered outline for user research has been completed in the very early steps of the project for user needs. According to the plan following decisions are made for early steps of user research.

In the initial steps of the project, STIMULATE concentrate on expert's information on travel information available, offers specific for seniors and technology experiences.

Expert information is gathered through:

1. Expert Workshops for defining travel related information about older people and people with disabilities

2. Expert interview on travel planning routines of senior people

3. Literature Surveys on technology usage, interaction and appropriate methods

4. Pre-study, observations and surveys conducted by experts and affine users in order to define the relations to travel routines, planning activities in general

Based on the expert information gathered, user studies are going to be conducted in two countries in form of focus groups concentrating on travel motivations, routines, and possible technologies. The focus groups will be built in a balanced way where different users will be involved.

The data gathered from multi-disciplinary, international studies will be evaluated to define requirements on user, context and technology related aspects. If needed these studies will be extended with in-depth interviews, which are going to be planned and defined according to the future needs due to not yet answered issues. Moreover other methodologies will be used and results will be iterated according to new born questions in the process.

Different levels of studies, starting from initial surveys on travel needs, will be furthered with co-design studies, field and contextual tests even with early prototypes or wizard-of-oz type of tests. Research will be furthered also on contextual issues about travel agencies, travel routines and similar in order to define the big picture of the communication and needs of older users in their travel activities. Contextual issues, acceptance and adoption requirements will be given equal priority in order to ensure the completion of a ready to market product at the end. Here not only the technology related issues, but also the contextual and more importantly experiences will be tested and tried to be developed in parallel to defined problems or also new possibilities.

Rather than concentrating on controlled tests by users, here again testing will be done in multi-stepped ways, where the controlled test are conducted by experts and affine users in the beginning, and experience realted issues are tested by older users and other possible user segments.

Pilot application

A two facet approach will be organized, building on an initial "early prototype" and on a later comprehensive "pilot application. The aim of the initial prototype is to secure very early on in the project a good representation and comprehension of the STIMULATE environment, by implementing during the first year of the project a multimodal (game like) emulation of the STIMULATE platform.

This will allow, in an iterative way to design the user interfaces, to specify the navigation and to validate the "use" assumptions. It will also allow involving very early on in the project the end-users and will help the developers better focus their work. Once all the software developments of the STIMULATE environment have been achieved, a pilot application testing the deployed environment with selected end-users will be carried out.

The evaluation of the STIMULATE system (work package 4) will mainly build on all the gathered information in Work package 1 and the following feed backs in work package 2 and 3.

Prior to each evaluation, the technical tests and expert evaluations will take place in order to detect technical and obvious problems in advance. By this way the system will be evaluated with users only for user relevant perspectives in pilot trials.

The evaluation of system in pilots will take place in Austria and France in two periods. The results of each evaluation task will feed back to the next generation of prototype and evaluation methodology.

The STIMULATE project will follow a value-centered approach in the evaluation and pilot trials. All steps of pilots will consider the value centered aspects of prototypes. The documentation and procedure of testing will be created to cover all value centered aspects and validation scenarios will include not only positive but also negative, or societal scenarios as well as diverse user profiles, such as extreme users.

Both the end-user groups like e-Seniors in France and EURAG in Austria will ensure the project is well aligned with older users' needs. Moreover Vienna University of Technology and other partners will collaborate with users and other user segment groups as they systematically build a knowledge transfer from a large set of gathered data on systematic categorization and extension of needs framework .

As a part of the end- user involvement strategy, user groups will be defined, selected and recruited by end-user organisations, following ethical and pre-defined guidelines related to STIMULATE project. Older people without any significant cognitive impairment will be the main user group of the project. The aim of the involvement procedure is to cover all the common characteristics associated with that age relevant to travel and shopping activities of older people.

The details of the pilot project will be defined after the first prtotypes are created according to the maturity elvel of the prototype. Rather than testing of early prototypes with given numbers of users, STIMULATE will follow an iterative way, where in the beginning smaller number of more technology affine odler users, and later largger number of mixed groups will try and give feedback about the prototypes.

End trials will be conducted both in Austria and France. At this level users will have a system installed to their home environment and they will have the chance to live with the system for a longer period.

The qualitative process in STIMULATE Project concentrates on following aspects:

Accessible experiences and inclusive simplicity

STIMULATE aims to create accessible experiences that go beyond the understanding of accessible systems, where the information accessibility, societal aspects as well as new technologies and their specific contextual accessibility issues are further researched. In the process the simplicity will not exclude information, or decrease the number of offers. This will be achieved by following a design-for-all methodology (e.g: unviersal usability)[135]rather than concentrating only on older users.

Values, motivations, context and experience:

STIMULATE aims to achieve a complete understanding of technologies, in real life settings. Therefore both contextual factors (such as itneros of the flats), or urban settings in realtion to mobile devices etc. will be thought in the project. The framework and later the trial plans include such factors in order to ensure the success of the product in the real life usage.

9.1.1. Examples to Design Methods

Additional to literature survey, expert workshops, focus groups and interviews for gathering insights to user needs, various creative methods can be used during the process, that can help getting into the real lives of possible users, build and test almost-real-life experiences.

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[135] Zajicek, M., and Edwards, A., 2004, Universal usability revisited, Interacting with Computers, 16 (3), pp. 403-410

For creating a framework that includes broader aspects of needs,: aspects such as value centered design or worth centered design and experience frameworks can be considered in order to balance diverse needs of diverse stakeholders(e.g: Friedman et al, 1996; Friedman et al, 1997)[136][137].

For creating ideas, older people can be motivated through either game based study setups, or with methods such as bodystorming (Oulasvirtaet al. 2003)[138]. or by using methaphors, scenario based role playing, narrations and storytelling (e.g: Geven et al.2006,)[139], For visualising initial ideas for development and understandibility, it might be interesting to work with methods like persona creation (Cooper, 1999), low-fi sketching and prototypes, experience labs and wizard-of-oz type tests (Refs). For organising data or making design decisions, in early prototype level, studies like creative workshops, cardsorting , think-aloud or contextual analysis can be interesting.

On general aspects of daily routines, cultural probes (Gaver et al 1999)[140], or technology probes[141], on lived experience participative approaches are to be taken as basis (Iaccucci et al., 2002)[142]. Diaries (Fleuriot et al. 1998)[143] that are written on the technology or the travel experience can give deeper insights.

For gathering information about real life patterns and routines of older user about how they plan and conduct journeys, it might be interesting to concentrae on fieldwork and

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[136] Friedman, B. (Ed.) (1997). Human Values and the Design of Computer Technology. CLSI Lecture notes No 72 and Cambridge University Press.

137 Friedman, B.; Value-sensitive design. Interactions, 3(6) 16-23, 1996

[138] Oulasvirta, A., Kurvinen, E., & Kankainen, T. (2003). Understanding contexts by being there: case studies in bodystorming. Personal and Ubiquitous Computing 7/2003.

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participant observations, evaluations of experience and everyday routines (e.g: Forlizzi and Ford,2000)[144].

9.1.2.Background and Target groups

The target group of STIMULATE project had been identified as seniors with and without any disabilities that are fully or partially mobile, tourism offices that offer senior tourism travel planning, and other possible people such as family members who can help seniors in their travel planning. The studies that are explained in this deliverable cover:

Literature Survey	Conducted mainly by HKU, TUW supported by EUR,ESEN
Pre study Self Prototyping/Self Reflections	Conducted by TUW, **1 design ethnographer** involved
Pre-study Survey with design experts	Conducted by TUW, **11 interaction design experts** involved
Expert Workshop 1	Conducted by AFC, **4 experts** involved, documented in an internal report
Expert Workshop 2	Conducted by DMMR, **4 experts** involved, documented in an internal report, included another interview with a big tour operator
Focus Group 1	Conducted by EUR supported by TUW in Austria, **3 participants** involved

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Focus Group 2	Conducted by EUR supported by TUW in Austria, **6 participants** involved
Focus Group 3	Conducted by ESEN in France, **12 participants** involved (planning is supported by TUW/EUR)
Focus Group 4	Conducted by ESEN in France, **11 participants** involved (planning is supported by TUW/EUR)

Table 1 Methods applied for knowledge elicitation and participants

10. Pre-study 1: Results from self-prototyping and non-participant observations in the field

The self prototyping exercise was conducted by a design ethnographer by using off-the shelf products in various combinations to experience-prototype the future STIMULATE Project on the move assistance. The documentation included, problem and positive experience reporting, anonymus photo-taking and chit chatting.

The design ethnographer has planned short trips or transportation and transfer activities apriori by using laptop and this was synchronized with mobile apps before the vacation/travel takes place. The data included (in different combination in different travels), travel sight seeing tours in pdf form, a map with point of interests, a metro map of a bigger European city, an address recorded to a google map as destination point, recommendations for special dietary requirements.

During the trips the following points are remarked in forms of field notes:

Lack of mobile internet (Especially due to roaming costs), causes loosing information (e.g: address on the google map). Although the map itself is cached, the addresses (destination points) disappeared more than once. This unexpected loss of important information caused the person to have **very bad experience due to fully trusting the system**. Without having any paper with proper address in hand, she needed to get this help in other ways. These ways included asking to an information desk and further to other people. Here lacking a real map, the proper address or a telefon number can be counted as problems. Moreover, once the person asked the name of the building where the ethnographer was willing to reach, as she recorded this information in the addressbook, she needed to switch the screen and then it was hard to find the point in

the map again, once the address was found from the address book and noted down to a piece of paper.

Lack of GPS: In most of the travel planning and help problems, one major problem was lacking of **GPS in bad weather**. Here the system basically dies and the user is usually left alone.

The charge is law: In case of the person carries a mobile device in travel activity, which is used as photo machine, a gps localizer and a pdf-point of interest travel book, the maximum time it allowed for travel was around 2 hours. As most of the time these activities are combined even further with music or any phonecall, sometimes internet, the charge goes law very fast. Here the suer not only looses a travel support, but also a map, a travel guide and the phone.

Environment and expensive devices: In two cases the ethnographer tried out the smart phone and a tab in hiking. This activity was really hard to negotiate with a smart device which is **carried in hand all the time**. It also needed to be negotiated with other equipment's materiality, such as the backpack, Nordic sticks or wearing gloves.

Unobstrusiveness: In general smart phones found obstrusive, when travelling in group. Therefore **the use is not continious but rather supplementary**. Again in this case, it is hard to negotiate the materiality of the phone with other things used, or with other members.

Other equipment: In observations part, it was realized that, senior travellers (senior people around visiting places, info desks) were carrying a lot of things with them, like photo machines, shopping bags, sometimes a stick, normal bags, water, travel book and some printed documents. It is important **how the system can negotiate these materials and context related further interactions.**

Multi-Tasking: Another issue is having multiple needs with the mobile device, such as calling someone, taking photos, using the map and having an online travel guide. The switches between different tasks should be clearly defined.

11. Pre-Study 2: Early Technology-Adopters, Travel Planning and Vacation Routines:

In the very early days of the project, an online study was set and sent out to 22 people per email via email list, where the members are from area of interaction design and are very affine technology users. 11 full results are received. The results of this study can not be

evaluated as a stand-alone representation, still it is possible to interprete some of the answers for initial designs of STIMULATE Project.

Gender	**Female (F) 45.45%** **Male (M) 54.55%**
Age	18-30 18.18% 30-50 63.64% 50-60 18.18%
Occupation	More than 90% of the participants are working-people or occupied with a weekly schedule.
Vacation Accompany Preference	with partner 72.73% with partner and children 18.18% with friends (and famliy) 9.09% Here the options such as travel group, unknown people or alone were not selected.
The technology affinity level	is starting from upper-intermediate (use intenet for banking, other information frequently) to early adopters (internet usage through mobile device daily- more than 50% of participants)
Internet Usage at home	between 1-3 hours 36.36% more than 3 hours a day 63.64%
Television Usage	More than 90% of participant either uses TV non or less than 30 min a day.

Table 2 Demograpichs of experts

According to the demographic part of the survey, it can be concluded that the users that are asked here are affine users, with a heavy work-load. The standard survey pages seem like below, where both fix answers and comment space is given for most of the questions. This study aimed to get information on people's travel motivations, experiences and decisions, as well as planning orders. Questions were divided into following pages:

1. Motivations: General questions about main motivations behind travel plans.

2. Planning Travel Activity: Mainly ranking tasks on travel related activities, planning priorities…

3. During travel, daily routines

4. After Travel: What people do after travel with their data, or other reflection options.
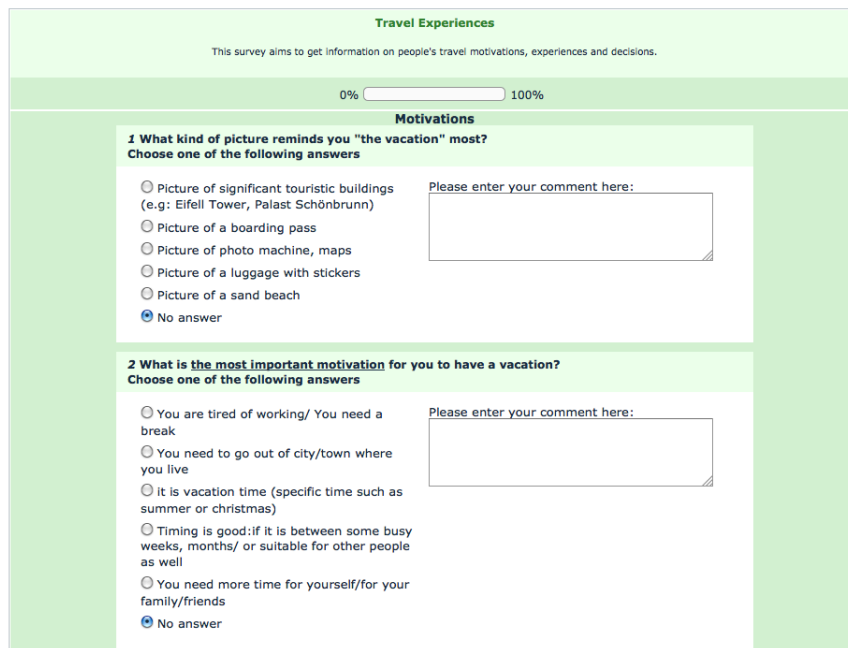
5. Technology affinity, age and occupation information

Figure 8 Travel experiences Survey Interface

Figure 9 Travel Experience Survey Planning Related Questions

Figure 10 Travel Experience Survey Daily Routines

11.1.1. Initial Results :

Visual interpretation of vacation: Among given answers and with free comments, a vaction was connotated mostly with a picture of sand beach or with a picture of

significant touristic buildings (e.g: Eifell Tower, Palast Schönbrunn). For other given options and comments this narrative is interesting to distinguish:

>*I travel a lot for business. hotels, boarding pass, maps, luggage are all linked with the idea travel and not especially vacation.(Participant15)*

Motivation for a journey: The main motivation for this group was "need more time for yourself/for your family/friends", comments included: family time, exploration, Having common experiences with friends, want to see different things, get new inspirations.

The idea of vacation starts: Here there were diverse ideas, two main points were commented often,as in the following example:

>*some ideas might be planned well ahead, while there's also spontaneous vacations Mostly spontaneous, a few weeks in advance.* (Participant 3)

Also different factors such as high-season times (Classical times for vacation), or other factors such as having kids were mentioned.

Among this group the answer "After seeing a nice picture on the new vacation catalogue" was never chosen.

The real vacation starts: Although the answers varied in the previous question, the real vacation is defined to start either "on the moment person steps into car/train/plane to depart" or equally "once one is settled in the hotel/vacation place". Another comment which can further be discussed is about people staying at home, for those daily trips or new exploration might also be interest for STIMULATE.

Travel planning starts with (from most important to least important):

1. In travel planning the group has defined the following order:

2. Where to go for vacation

3. How long would the journey take

4. When to start a journey

5. With whom

6. Time negotiations

The details of journey (planning order):

The transportation (plane/train etc.)

Where to stay

Minor trips in the vacation place

Organisation of things in the home town (e.g: payments, pets)

Who plans for the journey: The majority plans for her/himself, some for others as well.

Planning activities for last minute (As ranked below):

- visa, passport or similar documents

- payments/ medical care equipment

- garden, flowers

- other people you frequently see or take care

- pets/travel insurance (only 1 response)

Planning and internet for travel: All respondents are using internet for their travel planning and in the following points.

1. read experiences of the others from blogs and travel websites

buy travel tickets online

use online maps to see the places

2. reserve hotel room

3. collect offers (e.g: all in holiday)

Also mentioned were the weather forecast information and collect information generally about the region, regional travel costs.

Routines during vacation (as ranked):

- City walks (11)

- Small trips without previously planned (10)

- Cafes/restaurants (10)

- Longer nature walks /cycling or similar (9)

- Visiting churches /palaces /buildings (7)

- Daylong seaside visit (6)

- Nightlife after midnight(4)

Connected to home: The respondents are still connected to home during vacation via: reading emails, buying gifts, taking and sharing photos or sending postcards rather than active connections such as social media or calling back. Additionally SMS was mentioned in comments part, which might be considered between active and passive interaction.
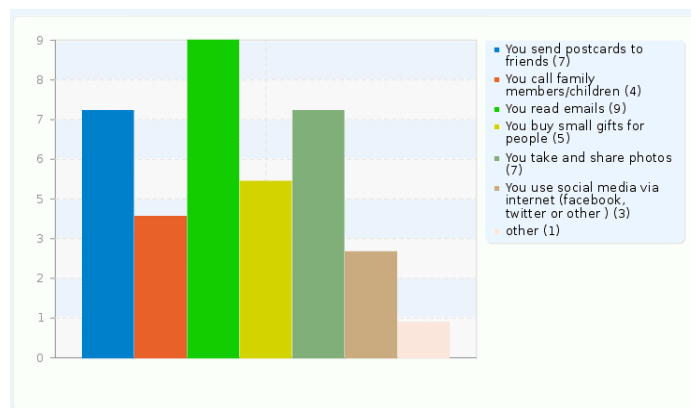
Figure 11 Connectedness to Home during Vacation

What kind of communication information material do people carry:

People carry cell-phone (in this case a smart phone as well), photo machine, printed material, maps and travel guide but less likely a normal notebook or pencil.
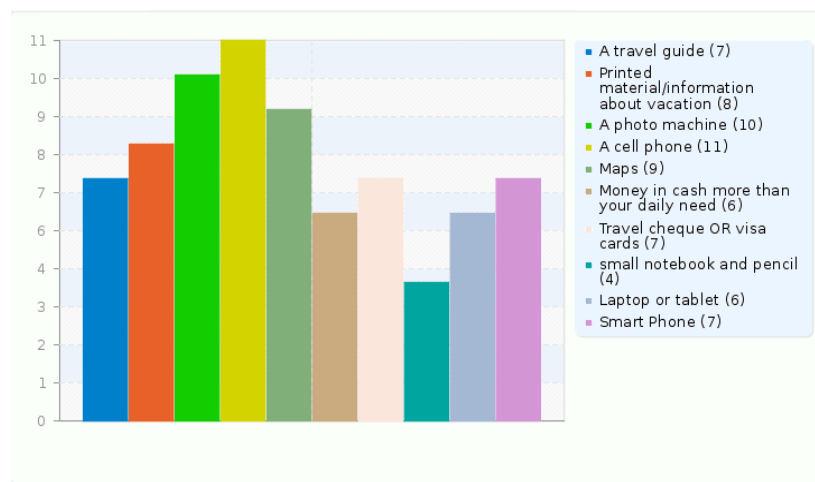
Figure 12 Communication Information people carry with

Smart Phone-Technology Adoption for Travel Activities:

Even most of the so-called early adopters has not yet preferred to use smart phone for payments or museum/restaurant recommendations.
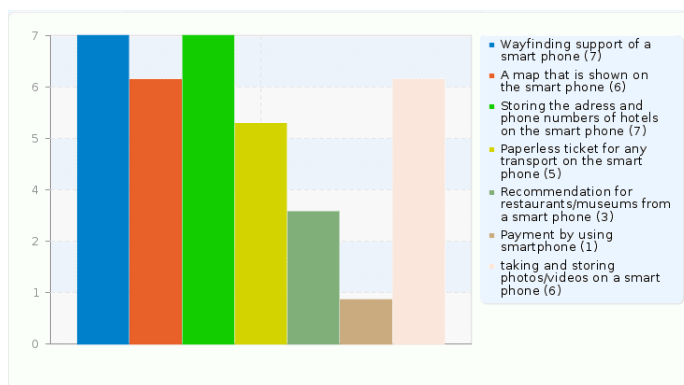
Figure 13 Smart Phone Adoption for travel Activities

Reflecting back after vacation:

Additionally SMS was mentioned in comments part.

Although almost everyone talk about the last vacation or extend the experience with carrying gifts etc. back for friends, to organise an event for sharing this experiences or reflecting back online (even in the early adopters group) were not preferred.
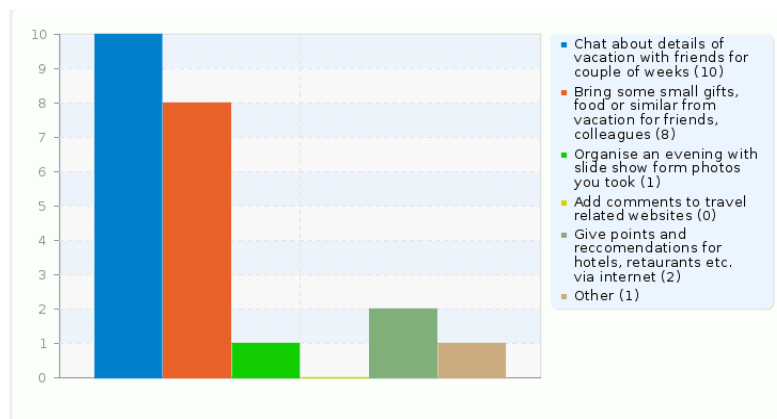
Figure 14 Reflecting Back after Vacation

Preferences on what to reflect back:
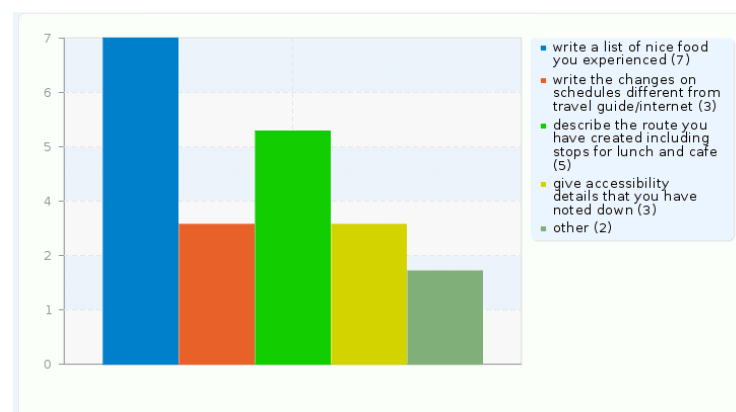
Figure 15 Preferences on What to reflect back after Vacation

Still if people really reflect back about their experiences, they seemed to reflect back more on positive experiences such as food or paths created, rather than accessibility needs or schedule changes.

What and where people store after vacation:
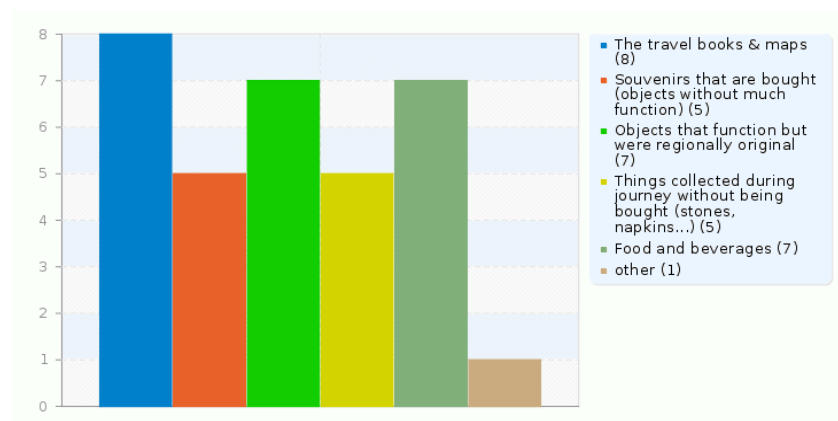
Figure 16 Souvenirs and Memo Mateials from Vacations

One countable trend is the collection of functional things such as the travel book or food&beverages, even functional objects are preferred to not-that functional souvenirs.
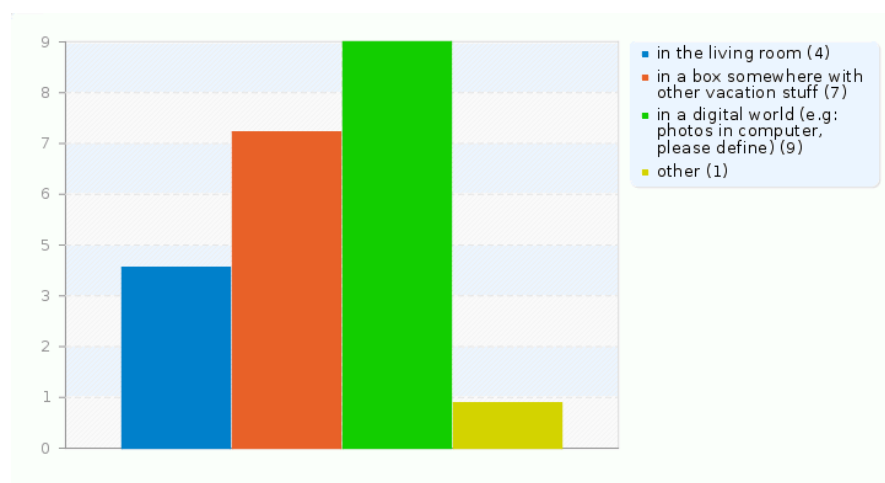
Figure 17 Storage Preferences of Vaction Memories

And here the answer to digital storage includes explicit comments that people prefer storing especially photos, and this especially in private computers and **not in internet**

12. Expert Groups Background Information

The expert workshops are organized in two end-user organisations that are active in senior tourism organisation. The outline for all open issues are collected and iterated by the experts in the consortium and a final questionnaire is created to be followed for expert comments. The questions covered both generalistic and more detailed issues that might effect the usage and adoption possibilities of STIMULATE project.

WP 1 Question List for TRAVEL ORGANIZER EXPERTS DMMR and AFC

The questions aim to answer as much aspects as possible regarding senior travelling and travel planning activities. The expert workshops and their reporting will inform the prospective STIMULATE Platform, by giving details on needs, motivations and routines on the seniors' travel activities.

Please feel free to reflect your expertise and lived experiences as detailed as possible. After conducting the expert workshops, in the report please do not hesitate to refer to other documents, giving concrete examples, extending issues where you see a relevancy.

Part 0:Types of Travellers
(The answers to these questions are important for categorization of senior types/travel types and similar)

1. Who are senior travellers (please *specify categories*)? What are the differences in travel preferences/needs of senior travellers in different categories?
    a. Age (55+,65+, older old, other?)
    b. Income and benefits (pensioners, beneficiaries of different benefit types)
    c. Other issues: group, gender, values, attitudes, lifestyles, interest (Please specify if any correlations are recognized)

2. Are there differences in needs/routines of 'travel-beginners' seniors and seasoned senior travellers ? (ESEN-revised by TUW)

3. What are specific needs of seniors with disabilities? (Which handicap?/How does it affect travelling?/Is planning possible? /Is travel possible? / Constraints / Existing information and services / ...) (ESEN-revised by TUW)

4. Whom do seniors travel with (young children / grandchildren) (ESEN)? Are there any vacation types which are suitable for seniors who are accompanied by their family (HKU)?

Part 1:Expected Travel Types / Needed Infrastructures
(The answers to these questions are important for categorization of travel related information, point of interests and similar)

5. What are different typical vacations that seniors usually ask for? (spas and "cure thermale", therapeutic rest, winter sun, summer coolness, cultural, discovery, exercising [hiking, swimming, etc.], family, roots, sea cruises, river cruises, etc.) (TUW /ESEN)?

6. What is the average length of the trip (*please also specify if different types of rtavels have different durations*)? (HKU/TUW)

7. What are specific requirements for seniors during travel (dietary/health support/other?) (TUW)? Is there any information available concerning medical or other requirements which are needed in the travel destination (HKU)?

8. Which seasons are preferred for senior travelling?(Relations of low-season/low cost?)

9. What kind of expenditures do seniors have during travel? (*see examples below, are there other issues that can be mentioned?*)

> for travelling by train, bus and ship
> for cultural programs, festivals, zoo
> for ticket for fishing
> for visiting thermal bath
> for dining
> for fuel
> for visiting zoos and sport events, and
> for certain cultural programs
> for leisure sport (e.g. fitness, wellness)
> for culture (e.g. museums, theatres, cultural programs)
> for health conservation/ illness prevention

Part 2: Motivations, values, travel experiences, traveller types, traveller routines

(The answers to these questions are important for categorization of information in the platform, a-la-carte travel sets, interface and visual language for seniors, advertisements)

10. What are the motivations for senior-travellers for having a vacation? Are there specific motivations different than younger traveller? (TUW)
    a. Social Motivations –Are there social motivations for seniors, like increasing social interaction, learnign new poeple?

    b. Economic Motivations- Are there any economical motiavtions such as helping underdeveloped/poor regions, choosing low-season to help people get jobs even in low season? (local regional develoment)

    c. Cultural Motivations – Are there any motivations learning cultural enrichment (is there a way seniors reflect back?)

11. Which indicators influence a concrete travel planning? (*conversation with friends about travel experiences? Media reporting? Advertising? Other issues?*) (EUR)

12. What do seniors expect from holidays? Which kind of requirements? What kind of holiday is the "perfect" holiday for seniors? Which criteria have to be fulfilled to be a successful holiday? How relevant are aspects like type of accommodation, food, choice of cultural/sportive activities, weather/climate, language, duration of journey/means of transport in this context? (EUR)

13. What about the travel behaviour of seniors? Are they happy to try out new things? Or do they tend always to the same category of holiday? (e.g. vacation by the sea or

cultural trip,..) Do they trust more the established way or are they open for new experiences? (EUR)

Part 3: Travel Planning activities:
(The answers to this question is important for scenarios, regarding planning throught TV and pc)

14. How do senior travellers plan their trips(TUW)? Do seniors plan their trips for a long time in advance? What are the concrete roles of the travel agencies(EUR)?

15. Where do seniors receive information for travel opportunuties/ booking? (*magazines, family members, friends, internet, travel agency, rotary clubs/retirement clubs/ social club, radio, television, other?*) (*HKU*) Do seniors tend to inform theirselves in the internet before going to the travel agency? Which sources of information are the most common ones? (EUR)

16. Do senior travellers use internet to book their vacation? Would they rather book through a travel agency? Is there an organization which specializes in booking vacations for the elderly? (*HKU*)

17. What kind of informations do they neeed and what are the priorities in their travel selection processes (TUW)? Which dimensions have priority when planning a trip? (costs, socializing/communication, get in touch with different types of culture, regeneration/recreation, change of scenery?) Which aspects are relevant for seniors (EUR)?

18. How is the general approach when planning a trip? At what point will the travel agency will be involved? Do seniors already have made a selection or is the travel agency the first contact point? (EUR)

19. What do seniors expect from travel agencies? Which are the main questions asked at the travel agency? Which are the central themes? Do seniors mention their worries and self-consciousness concerning the trip? How do travel agencies deal with this problem? Do they need powers of persuasion? (EUR)

20. If applies, what kind of technologies are used during planning and payment (specific websites, call centers, online payment...) (TUW)? Do seniors prefer to pay their trip in cash or with credit card? (EUR)

21. How detailed is the travel planning ?(eg. does it include local public transportation info: bus schedules, tariffs, flight end connections: local public transport, from and to airport transport facilitiesetc.) (ESEN)

22. How fast do seniors decide for a trip? Do travel agencies have to invest a lot of time for counselling or do seniors decide promptly? (EUR)

23. Do seniors use internet platforms or other technologies for planning travels? If it is not used, why not? (cost, accessibility, ease?) Is there a preferred technology? (HKU, revised by TUW)

24. If they book online, do they do an extensive online search when planning or are most content with general information about their destination? (HKU)
What works well in terms of booking behavior? What do the elderly find difficult/would like to see an improvement? (HKU)

25. How can this type of personal information (special needs) be used correctly so that people are interested in being part of the new digital community? (ie dealing with privacy settings). (HKU)

Part 4: On the move:
(The answers to this question is important for scenarios, regarding mobile help on the go)

26. With which kinds of problems are seniors faced during their holidays? (troubles/difficulties/obstacles,…) How can these be solved – which kind of support is needed? (EUR)

27. What information / kinds of information will seniors seek/need while they are on the move ? (ESEN) Is there any information seniors are lacking whilst on the move (*e.g. medication, post office, bookstore, transport, toilet, cultural activities, etc.)* (HKU)?

28. How can seniors be supported to guarantee successful holidays? In which areas do seniors wish a more intensive support in order to feel secure? (e.g. 24 hours hotline for emergency cases in all languages? local contact persons? medical treatment? …)(EUR)

29. Will seniors want to have geographical (physical/weather, etc.) + (cultural/historical/political/ etc.) information about their location? (ESEN)

30. Will seniors want to have sanitary and healthcare info about the location they are in (ESEN)?

31. What mode of transport is most commonly used?Are they aware of all the modes of transport? Are there barriers in taking certain modes of transport?
(e.g. accessibility, language barrier, safety) (HKU)

32. What kind of technology do seniors use/carry with them whilst traveling (cell phone, photo machine, internet, other?(HKU, revised by TUW)

Part 5: After travel:
(The answers to these questions are important for scenarios, regarding feedback and reflection after travel)

33. Which positive and negative aspects are mentioned from seniors in context with their travel experiences? Which aspects need to be optimized? Are seniors more critical

than other clients? Which aspects should be improved – from the perspective of seniors? (EUR)

34. Are seniors interested in a "post-travel-service"? Survey of consumer satisfaction (e.g. travel booking, itinerary, …) in order to mention the points of criticism (consumer retention!) (EUR)

35. Will seniors want to keep a record of their trip? (ESEN)

36. Will seniors want to complain/express satisfaction about their trip ? (ESEN)

37. Will seniors want to recommend some of the elements met during their trip ? (ESEN)

38. Do seniors like to share their travel experience with others? (EUR)

39. Will seniors want to comment on particular moments of their trip? (ESEN)

40. Will seniors want to enrich the data contents on travel activities? (ESEN, revised by TUW)

41. What would be an easy way for seniors to share the experience/travel with others once back from the holiday? For instance, is there an option to print out the information, tourist sites, etc? (HKU, revised by TUW)

42. Is there a way to collect information abut the travels which can then be shared with other interested travellers in the future? (e.g: *Digital archive*) (HKU)?

Part 6: OTHER ISSUES: *(The answers to these questions are important for future potentials and business plans of STIMULATE project)*

43. Do you think there is a market for a service as STIMULATE? What are the prerquesistes for making STIMULATE a exploitable success (eg. reliability, enough information etc.)? (HKU)

44. STIMULATE is aimed at "senior travelers", do you think it is potentially interesting for other user-groups? (HKU)

45. What barriers do you envisaged in the adoption of such system? (HKU)

46. STIMULATE depends on the availability of information from transport companies, how can we convince these companies to be on board and make this information available to us? (HKU)

47. Which kind of technology do seniors use in their daily life and for which purposes? *(Are there any statistics available per country/region/age group/gender For example: Idtv, internet, smartphone, ipad, tv., gps?)* (HKU)

48. Might seniors be interested in new technologies, new interaction types that can be used instead of traditional mouse and computer-screen for travel planning activities and support on the way (*example technologies might be using gestures, voice-commands instead of writing through keyboard, haptic feedbacks such as vibrating gloves or shoes*)? (TUW)

13. Expert Workshop 1 Results from AFC

13.1.1. Part 0: Type Of Travellers

Tourism is one of the areas touched by the aging population: 2/3 of seniors go on vacation. There are three different seniors' categories:

13.1.1.1. 50/64 years old: young seniors or baby-boomers:

- There are still active, close to retire, they have a good purchasing power. They also contribute to boosting the market for all sectors.

- They are us to travelling and master the tricks, even the most modern such as stays at low prices online.

- Baby-boomers require high flexibility and minimal assistance in organizing their trips. They value their independence but are lucid about their future: + than 73% of them will not only travel between seniors=refusal to be ghettoized.

13.1.1.2. 65/75 years old:

- Mostly retired, they have no dependent children. They repaid their loans and they have a lot of time they devote to the discovery of new experiences (travelling, products, leisure …)

- Their requirement for the content of holiday: discovery, health and fitness. They demand a holiday intelligent and open to the world: combining sports, discoveries and cultures (eg.in the US: summer school for seniors).

- They also travel with their families, they are customers of intergenerational stays (which are a bright future): some T.O specializes in this type of holiday: eg. US Agency Grand Travel.

13.1.1.3. Older seniors:

- Leisure activities are a recent innovation for them more or less mobile.

- Overall, they prefer to stay in France on the coast or in the countryside.

- They need great care and are happy to travel in groups.

13.1.2. Needs and routines of "travel beginners" and routines of Seniors with disabilities:

No serious study has been made regarding the needs and routines of "travel beginners". For seniors with disabilities, various sources are available.

13.1.2.1. Where to find information and how to organize your stay:

Each year, the organization of holiday arises enormous difficulties for people with disabilities and their family. Adapted stays, accessible places are few and not well known. There are several organizations working to promote access for people with disabilities in leisure activities and vacation qualities:

The Conseil National of loisirs and tourisme adapté (CNLTA) brings together associations organizing stay for people with disabilities and whose goal is the pursuit of quality. It monitors compliance by the member associations of the charter of quality that il has adopted. Source: www.cnlta.asso.fr

The association des paralyses de France (APF) distributes a guide for people with mobility impairments. The guide selects activities, ideas for stays and accommodations accessible to people with disabilities (eg. This guide includes a map of beaches and swimming areas available throughout France). AFP, Direction de la communication, 17 BD Auguste Blanqui, 75013 PARIS.

Former Paralympic champion, Ludovic Rey-Robert is the source of the first travel agency dedicated to disability: www.vitavietravel.com

Specialized Accommodations ("gites"):

A number of gîte de France is accessible to people with disabilities. To know them, you must contact departmental delegations. There are no longer guides showing accommodations for people disabilities. www.gites-de-france.fr

Regulations and structures implemented:

More and more accommodations are adapted:

Everyone should be able to go on holiday wherever they want regardless their handicap. Since the Act 11th February 2005 on equal opportunities, the owners of tourist facilities are required to take into account accessibility for people with limited mobility but it will be applied and mandatory from 2015 only.

The tourism and disability label:

This Label guarantees disabled people access to different accommodations. www.franceguide.com

The choice of the region:

A draft Label "destination for all" is under consideration, which should allow to distinguish the territories offering to people with disabilities adapted benefit services and accommodations. Expected launch spring 2011.

13.1.2.2.   Family trip or intergenerational:

Seniors parents or grandparents like family trips, several trips of holidays are offered by different types of specialized organism:

Family offers in hotels club, see interview DMMR/Vacances Bleues.

Summer camps for intergenerational kids and their grandparents: joint   activities   are organized each day corresponding to a theme (eg. Days "mission Robinson" or "Olympiades"), see www.vitacolo.fr

A new innovative from of intergenerational trips that some cities are experimenting, their goal being to create a social bond between generations. The concept: for a week, retired and younger people will go explore the heritage, participate in activities and share their experiences .Refer the article on the web journal of ESSONNE: www.essonneinfo.fr

Solidarity stays intergenerational, some organizations implement trips for grandparents and grandchildren: for instance in MOROCCO: They will live an exceptional adventure with the family of the village and will share their everyday life. This solidaity trip will enable to replant date palms to keep intact a palm because it is a victim of desertification etc…

Refer to the article: www.ecotourisme-magazine.com

All operators (rail and transport, tours operators…) offer family packages grandparents/children.

13.1.3. Part 1: Travel Demand And Infractructures

We have witnessed with the arrival of baby-boomers to a cultural revolution of the trip: A cultural requirement, a discovery of aboriginal life, learning about culture and regional heritage and also a desire for solidarity and ecological tourism.

13.1.3.1. Type of holidays:

In general, seniors look for holidays which make sens: they favor culture, discovery, contacts with people through formulas including visits and contacts with the local. Their requirements about the content of the holiday: Discovery, health and fitness will strengthen in the coming years. The intergenerational trips have a bright future.

Young seniors dare to distant destinations: among their favorite places: Spain, Balearic Islands, DOM-TOM, Morocco, Tunisia, US, Canada, Egypt and Thailand and recently China.

65 years old and more, theirs stays are mostly in France, on the coast, in seaside resorts, (regions: PACA, Languedoc Roussillon, Bretagne, Aquitaine) and the countryside (Rhônes-Alpes, Pays de la Loire…).

Some of them travel as well to recover health (spa, rest and relaxation…).

Some go for long stays, several months (2 or 3 months according the visa). They are snowbirds retired, they leave for the winter season to settle in sunny areas (holiday villages), in Tunisia or Morocco and enjoy all sort of leisure activities and services nearby.

This diversity makes seniors move towards distinct bids; their common features are comfort and quality services.

13.1.3.2. Average length of trip:

Young seniors are related to tourism close to youngster but with a longer average length.

Retired have more time and enjoy promotions all inclusive: 3 weeks for the price of 2 in Morocco or in Tunisia as proposed by Nouvelles Frontières (offer not only for seniors but meant to attract them).

This information is provided solely for information purposes. To get more accurate data, we must take into account medical trips (cure, treatment...) and questionnaires made by ESENIORS and EURAG.

Seniors specific requirements during their trips/is there any kind of medical information or other application available on site:

For general tour operators, accommodations and restore requests are handled on an individual basis (access for disabled, food allergies, specific meals such as vegetarian, cultural...).

To qualify for insurance TO, some traveler with particular diseases are required to take a paid escort for them in order to ensure their comfort. There are professionals who take into account the new segment of the major and or severe disabled.

 In case of health problem, doctors and hospital are requested via travel insurance (Mondial assistance...)

In most cases, information about the medical infrastructure is given in the travel books and on site (hotels, clubs...)

Some pension entities involved in travel provide certain information to their members but only on request.

Such information is usually little or no treaty and this lack of information prevents many seniors and disabled to move or travel.

13.1.3.3.   Seasons and periods chosen by seniors – low season/low cost?

Given the economic problems, seniors are ubiquitous in the custody of their grandchildren during the year and school holiday. For people over 65 years old, 51% leave in the summer.

So we see two distinct segments:

Young seniors still active and major (whose grandchildren are growing up) choose low season periods to enjoy better offers both financially and tranquility.

But seniors travel as well the rest of the year, taking advantage of low season prices or promotions. That's why we tend to find a high attendance of old people in off-peak times.

The seniors' expenditures during their trip:

Apart from young and old seniors division, a gap exists in sociological and cultural spending and their organizations.

In North and Central Europe, people prefer formulas all inclusive, and cultural activities and other leisure activities are through offers made by the TO and Hotels. They are often taken of the order of the trip.

In South Europe, majors plan activities before leaving and/or choose their destination according the offered activities.

These organizations spending change with baby-boomers who prefer "à la carte" services or develop their own programs.

13.1.3.4. Part 2: Motivations, Values And Travel Experiences, Types Of Travellers, Travellers Routine

Social Motivations: The trip in itself, alone or in group is a way to break the isolation. The desire to meet new people.

Economic Motivations: As well as youth, young seniors look for cheap holidays on line or somewhere else. Retired for their benefit of affiliation or partnership between agency plans and professional journey (refer to interview DMMR/Vacances Bleues) or for instance: AG2R created by PRIMAVACANCES. Older, for their part, senior member of the club or other associations active can benefit from group rates.

Cultural Motivations: The desire to discover other places, other countries, other cultures, other languages: seniors are more and more appeal by language stays. The desire to satisfy a passion by participating in learning stays (what we call "the technical Tourism"), for instance to learn ancient craft (watercolors outdoor, manufacture of decorative fabric, wood work…).

Seniors travel the same way as younger people do. They do not seek to stand out from others afraid of being herded from old. This explains that there are few offers exclusively for seniors. Some tour operators are addressed to them directly such as Vacances Bleues and Primavacances. However, people getting older lead to a specific demand from majors. Associations are created to compensate for the lack of offers in this segment.

The indicators: Apart go family or friends distant, what influences the choice of destinations:

Friends

As part of a senior club

Catalog of pension funds

Offers of gifts from family

On social networks

Proximity to friends or family

Reports and reviews on t.v

Newspapers and magazines…

13.1.3.5.   Part 5: After The Trip

Most seniors rate their trips according to questionnaire quality. We must motivate them for completion. This problem is solved when a guide is with them. However, a minority is using usual social networks (Facebook, blogs…) they are not sufficiently numerous and representatives to qualify the study. Some elements are given in the interview Vacances Bleues.

The easiest way for seniors to share their holiday/way to collect information on travel:

Some intergenerational associations organize workshops around a destination (travel experience, contact…), from these workshops, it'd be possible to:

Animate with photos, videos, fun and/or useful addresses,

Create discussion groups to share experiences on their trip,

Provide information about possible links on the internet,

Collect and identify information

13.1.3.6.   Part 6: Other Issues

The seniors tourism is a huge market that allows STIMULATE to largely exist. Demand is present, all one has to do is to develop a commercial offering flexible and tailored to consumer demands, in their respective segments. Targeted market research, prescribers will be required.

Collecting information on specific services (medical, paramedical…) should be as comprehensive as possible.Touristic and hotel information are accessible to any platform. Creating a pilot group will have an accuracy on STIMULATE's offer. It is also important to lobby with transport operators, hotels and catering, local authorities through seniors networks (AFC works in this process).

We must cooperate with many European programs such as CALYPSO to make STIMULATE more visible.   Nevertheless, we can forget that one of the obstacles to STIMULATE project is the seniors digital divide.The specific questions about TIC will be given by ESENIORS specialist in this field.

13.1.3.7.   Further References:

Information according seniors:

www.info-seniors.com ; www.lesgrandsparents.com ; www.notretemps.com ;

Websites treating tourism or society:

www.coachomnium.com ; www.lemarchedesseniors.com ;   www.xerfi.com

Seniors with disabilities and tourism:

www.cnlta.asso.fr ; www.vitavietravel.com;   www.franceguide.com ; www.gites-de-france.fr
www.ecotourisme-magazine.com/rubrique/voyager-autrement/tourisme-handicap/

In Ecotourism- magazine: 4 examples of stays and activities of leisure for the disabled people:

New purposes of stays for visually impaired people or blind with the T.O "AZIMUT VOYAGE". (www.azimut-voyage.fr/non_malvoyants/voyage_almou.html)

News in 2011 l'ONF created five new trails accessible by a disabled persons, mentally disabled, deaf, visually impaired person or blind, for nature lovers and life in the forest (eg. The sensory trail of Carnutes in state forest in Orléans…)

The project « Handi Cap Océan- le petit Nice » has been made by the ONF. Structures adapted for disabled person have been established to allow a access to a wooded area and as well the beach. www.onf.fr

Result of a partnership of the National Park of « Ecrins » in Hautes- Alpes and the APF. Several days were organized to participate at the count of royal eagles. Refer : www.ecrins-parcnational.fr

Family trips or intergenerational:

www.vitacolo.fr ; www.ecotourisme-magazine.com/sejour-solidaire-intergenerationnel-au-maroc/ ; http://sejoursoliadireentregenerationjuvisyr.unblog.fr/tag/deroulement-du-sejour/ (www.essonneinfo.fr)

Tour operators:

www.vacancesbleues.fr ; www.primavacances.com ; www.platinumvoyages.com ; www.vacances-seniors.fr ;

Social Network for seniors:

www.seniorevasion.fr

Advantage and Good Bargains of Seniors:

Rail : www.voyages-sncf.com: SNCF established for seniors, an advantage card especially for them.
Airlines :www.airfrance.com : Most of Airlines companies offer reductions : Airfrance offer a service de prise en charge pour les personnes âgées à mobilité réduite « service saphir ».
Car Rental: www.avis.fr : Avis moved the Avis Club Senior card to take advantage of certain benefits : upgraded and discounts.

Accommodations :

- www.mercure.fr propose an offer 2 for 1= The same price for 1 double room or 1 single.
- www.centerparks.fr: Center park gives rebates for renting a cottage.
Leisure and cultural activities: reduced admission museums or theater …
Low Season trips and Snowbirds retired: www.estetikatour.com ; www.sangho.fr

14. Expert workshop 2 from DMMR

14.1.1. Synthesis Of The Research Conducted With Tour Operators

Our mission is to meet tour operators, which are specialized in travel for seniors and ask them questions about specificity of the mobility of seniors. This mission is linked to the expectations defined by the working group.Our first task, after the full transcription of the

questionnaire, was to adapt it in anticipation of a phone interview.A first test was done with a tour operator in Switzerland, who was kind enough to play the game and has responded by mail.

After an analysis of this very first result, we have redefined our questions. We are committed to find a very representative target. Being given the short time for the mission, we decided to meet Vacances Bleues (V.B.), the most important tour operator for senior in France, and to be focused on it. Guy Scialom used his network to obtain a meeting, in a very short period of time, with the head of communication for the V.B. group.

The phone interview has been done on October 13th 2011. A provider led it with Ms. MarianneYung, Director Marketing and Communication for V.B. The full interview was recorded and transcripted. It is available in the original language.

14.1.2. Presentation Of The Company : Vacances Bleues

VB is a company from Marseille, which was created in 1970. V.B. is a leisure and hotel chain, which is now positioned among the top 15 tour operators in France. V.B. celebrated its 40 years of activities in 2010. Its main specificity is the attractiveness it has always had among seniors.

Some figures on Vacances Bleues in 2010:

· 1.041.000 nights

· 200.000 clients for the year 2010, including 80.000 in stay.

· 980 employees

· Turnover of 82millions euros

· 25 hotels (occupancy rate: 66%)

· 140 destinations in France and abroad.

V.B. is developing several products in parallel with the diversification of the demand: hotel club, village club, rental studios and apartments, free trip abroad or with excursions or tours, river cruises, hiking, solidarity tourism but also business tourism.

V.B. is a modern company, which analyses the expectations and demands of ist clients in order to accordingly, adapt its offer. The group has created a blog http://blog.vacancesbleues.fr,, updated its website and created a Facebook Fan Page available on :

http://www.facebook.com/vacancesbleues.

14.1.3. Composition Of The Senior Population According To Vb.

Since the origin of V.B. in 1971, a lot of retirees took advantage of the concept of holidays in hotels-clubs. « Regarding holidays, we welcome 70,000 guests including 40,000 seniors. Travelers groups are mostly seniors, although we have no exact counting of the population ". Nevertheless, the evolution of habits and behaviors of this age group highlights two major groups.

Traditional, named « tradi » are mostly the older of senior guests. They are representing 7000 clients, whose main features are their fidelity to the V.B. group, even to repeated stay for a year which are the same from a year to another: By example, Lemon celebration in Menton, June in Hyères and another stay for back season. « We have 7,000 very loyal households who come at least once a year, about 25% of seniors living in individual stay ».

These clients choose « all-inclusive » formula and they do not look for activities out of hotels. They consume free daily activities.

The new seniors (though they do not like this expression). New retirees (around 60-65years old), asking offer diversification and refusing monotony. They demand a wide range of service in which they are choosing what they want. " These category refuse to be seen as senior. We should not approach them like that. It is a very difficult public in terms of fidelity. They can consume a product and choose another even if they are very satisfied of the first one". These persons are Internet users. They search and compare on it before doing a first demand. They have always traveled. "There are people that have always traveled, who knows a various offer of holidays, who want to discover new things, several sport activities, balneotherapy, discovery of surroundings and consumers of many services in the hotel"

Senior people with disabilities are a minority and their application is considered on a case-by-case basis. We do not feel it will develop a spezial offer.

- Older people "dependent" or large seniors are excluded from the offer. « ...Because we are working in the field of holidays. The issue of people who are in addiction, older people, it's not people who are in the process of going on vacation! So that does not concern us »

In fact, V.B. has not offer for this last population because they have a business strategy. It is easier to attract new retirees, with a best purchasing power, and to change the offer to this population instead of to adapt to the older. Cohabitation between different age groups is not simple.

However, V.B. foundation is leading a project since 2004 which propose, via social services of pension fund, a new program named « le temps des vacances ». These are 10 days holidays for seniors isolated socially. This concept includes support from home and back and coaching by volunteers throughout the stay in the chosen sites for their comfort and location. Between 2004 and 2010, 800 great seniors have benefited from this program.

14.1.4. Vb Means Of Communication

If the paper catalog is still widely distributed, V.B. has increased the communication media to broaden its target. Thus, V.B. now affects 30% of new customers per year. Word-of-mouth still is their best advertisement. This reflects the very high rate of customer satisfaction (90%)

V.B. also benefits from strong partners through pension funds: MACIF, MACIF, CAMIF, ALIZEE, MAAF that relay V.B. offers in their catalog of services. Nevertheless, V.B. developed other means via the Internet, with, in particular, "a site that has nearly 2 million visitors annually. So we play the card of referencing on the Web, making banners campaigns, are present on platforms of affiliates, we make also a purchase of keywords on Google "

Internet is today for most of their clients, the first way to know the offer V.B.. The newsletter is expected and in particular special offers. Almost all seniors have a new email address.

In "traditional", the youngest of them have one. It's more a question of age comes into play. The vast majority of seniors in all categories, prospecting locations, prices on the internet. Some of them also require an online quote. Virtually all will complete the application on the phone especially for the demands of their living conditions: adjacent rooms for intergenerational stays and tribes, guarantee a room near the reception, on the ground floor and so on.

"... By phone, the choice of the hotel is concerning the proposed activities, the quality and organization of accommodation and restaurant"

The equipment of the hotels has changed: There are also more and more computer equipment with free Wi-Fi in public areas (reception, bar) and computer available. The free Wi-Fi is widespread in hotels for customer seminars (eg : Hotel Provinces Opera, Paris X th)

To gather opinions from customers (satisfaction surveys), the paper questionnaire

was the only tool up to now. In order to better adapt to the expectations of its

customers, V.B. will double the survey by mailing.

14.1.5. Planning Of Activities For The Stay

Seniors 'traditional' focus stays in hotels Club where the whole organization is under the responsibility of V.B., with in particular a wide range of activities at no extra cost. On site, new offers could be proposed but are optional, with a financial contribution: excursions or special treatments. The organizational aspect is fully delegated to the tour operator.

In contrast, active seniors anticipate doing research (via internet in most cases) after the choice of destination and booking their stay. They already have knowledge of tourist attractions on the place. There, they make the choice in the range of services offered and solicit the views of V.B. reception staff but also use their private vehicle to get information from the tourist office, find a site, a museum, exhibition or other. V.B. continually adapting

the offer to its customers, the variety of supply limits nomadism and the desire to look elsewhere for what is usually offered to the Club!

The formula "Hotel Club" still retains its attractiveness to families and tribes by offering a nursery, an entertainment service for children and for adolescents. V.B. through this formula provides an alternative choice for the generations gathering.

14.1.6. After The Stay

V.B. Seniors respond more easily to the satisfaction survey while, to increase the rate of return, V.B. decided to email them a questionnaire at the end of the stay. As mentioned previously, the satisfaction rate is very important (90%). The recurring complaints concern one hand the opening hours of the bar and restaurant that V.B. has had to make evolve with larger amplitudes for employees working V.B. On the other hand the night activities: too noisy for some, not enough music in the bar ... everything and its opposite, sometimes making it difficult cohabitation of people. V.B. must adapt its infrastructure to meet these different needs, multiply the scene to gather those who want to dance, who wants to live music, and those who dream of a quiet terrace to share a drink with friends.

Through Facebook, seniors sometimes leave stories and share their photos.Meetings organized by V.B. sometimes extend through telephone calls or emails.

14.1.7. Further Conclusions From Expert Workshop (Dmmr)

We cannot conclude this summary to share some discomfort. Indeed, we went to make a survey on senior. At the end of the investigation, we are asking the question "Where are the seniors? "Our contact person, Ms. Yung, has widely described these new retirees but she said that apart from the fact that they do not work anymore and therefore can go on off-peak periods, they are not distinct asset. "As I have said, the word senior is no longer so much sense". At another time of the interview she said: "Their behavior is actually quite close to those of active people." The "traditional" meanwhile is close of dinosaur extinction, even if it concerns 7000 today.

For leisure, the demands of pensioners have changed considerably. The level of demand has increased. Bids are carefully studied and compared. Internet is commonplace, the requests are mainly the variety of products: the pensioner in VB can in

one year, travel 4 days in Prague with friends, take one or two weeks with the children and grandchildren in a hotel club, a ski stay in the winter or a wellness break including, besides the discovery hikes, activities such as Tai Chi Chuan and Qi Gong, the Do, etc.…

15. Summary and Procedures for Focus Groups

The focus group with seniors in Austria was conducted by EURAG and TUW according to the results of expert workshops. In the recruiting phase variety criteria were used such as gender, age, mobility level, travel preferences, living in rural or city. Informed consents are prepared by following ethical guidelines from EU and Austria. The questions are initially prepared by TUW in 4 categories of travel activities: meaning of travel, planning, on the move, and after the travel. The wording, understandability and potentials of these questions are tested by 12 design experts via an online survey. After refinements, this questionnaire is shared as an example and all the other partners apart from two trave organisation groups extended the survey according to expected needs of STIMULATE Project. After expert workshops took place, some of the questions were fully covered, another refinement has been made at this point. For the focus groups in Austria, the 3rd time refined questionnaire is used. It is translated to German and divided into slides according to a travel timeline. In order to give an idea about the STIMULATE project interactions, two videos are prepared, simulating a STIMULATE like system. Moreover, a tablet PC was introduced in the session, where the comments in general about mobile technologies and interaction was asked. During two sessions, 1 discussion lead from EURAG and 1 participant observer and 1 non-participant observer from TUW were available. The two sessions are only audio recorded and later documented. During the sessions a short introduction is given about the project and aims, but the project is not introduced into technological details in order to avoid bias. The focus groups took approximately 2,5 hours each. Following issues are covered in detail:

general question about travel planning and support

idea generation about interaction with mobile and television for travel planning

Acceptance and adoption requirements

After this, TUW and EURAG refined the questions, and refined questionnaire with comments is sent to France. In France the seniors selected have different profile than in Austria (income, tech. usage…)

15.1.1. Summary of Focus Groups 1 and 2 in Austria

Why do older people go on holiday – what is the motivation behind it?

The main reasons for travelling mentioned by the participants of the focus are: to learn something new, get in touch with foreign countries and cities, cultures and people, Furthermore, the participants of the focus group travel to visit friends in Austria and abroad, they travel to relax and recover – but this is not so much in the foreground. The aspect of life long learning was also mentioned by one participant.

What do older people expect from a perfect holiday?

The term "Perfect Holiday" has been interpreted by the participants of the focus group in very different ways: while a part of the group meant with perfect a smooth process of the planned trip, which includes perfect accommodation, weather, etc., and fulfils all that was promised. The other part of the group felt that a holiday can never be perfect and one has to deal with insufficiences. One respondent felt that a holiday is good / perfect, if curiosity can be satisfied and one returns back home in good health.

Health and physical well-being have been mentioned in connection with a perfect holiday again and again.

At what times do older people prefer to travel?

For travel times, the group was largely in agreement: that the height of summer is not the preferred travel time, on one hand, because it is too hot and overcrowded by many tourists, on the other hand they like to spend the summer at home , even as some of the participants do have a garden, which wants to be cared for and enjoyed. Pre-and post-season are more used for travelling, but generally the participants adapt to the weather in the country they like to go, ie when is the best time for this or that country. Corresponding services are used.

What kind of holidays do older people prefer?

The majority of the participants is travelling individually. Different types of vacations are made: Adventure Travel (with horses), cruises, cultural trips, car trips and excursions.

Duration of trips?

The duration of trips are ranging from 3-4 days up to 3-4 months. The majority of the participants likes short breaks (i.e.long weekends) and trips up to the length of 10-14 days.

Destinations – What about the last trips?

The destinations are very different - the last trips of the participants were: Greece, Carinthia, Dubai, Bad Hofgastein (Austria), Istanbul and a course of treatment in Baden (Austria). These trips are described as typical for the travel behaviour of the participants of the focus group.. The trips lead to domestic destinations and to foreign countries (America, Middle East,…), Most of the participants know Europe very well.

With whom are older people travelling?

Only 2 participants are travelling alone (within a group)- the majority is travelling with the partner or with friends.

What expectations do older people have on perfect vacations?

Regarding the expectations of a perfect holiday health was always mentioned as the main factor.

Small imperfections can be handled locally, positive thinking is placed in the foreground. The claims are not extremely high, if they can not be fulfiled, then older people seem to be flexible in solving the problem and make the best of it. Once the goals one has set for the holidays are achieved, one can say that the holiday is perfect.

Nevertheless, cleanness is mentioned as an important factor for a perfect holiday while eating does not seem to be too important.

What do you think - why people do not travel?

The main reasons for not travelling are primarily financial and health situations. But basically it is dependent on the personality, whether one is interested in other cultures or they do have other hobbies such as gardening, etc.

Even the fear of strangers and homesickness were cited as reasons why people do not go away

Are there any problems with language while travelling?

Participants agree that the english language is nearly understood worldwide – if it is not the case that english is understood, they try to explain theirselves with the help of hands and feet. A lot of gestures are well know all over the world.

Planning and booking of trips

One part of the group is doing both via Internet. They are searching for information, comparing prices, organizing excursions, booking flights, renting cars, etc. But even the experience of family, friends, collegues, trip reports, forums etc. is influencing the planning and booking procedure. The other part of the group likes to inform themselves via catalogs, books, brochures, city guides, tourist boards – and either they are doing the booking in the internet or via travel agent. Much is also left to chance, trips are not always planned in a very detailed way.

Preferred means of transport

The preferred means of transport of the target group are the following: aircraft, because long distances can be covered quickly - a car is often rent locally. Shorter distances are covered by car, since one is more independent in comparison to travel by train.

Professional assistance concerning planning and booking

Basically there is no need for professional assistance – sometimes bookings are handed over to travel agencies, professional assistance in planning is probably not very popular, especially for special tours: in several cases the travel agent knows less than one self. Internet is a source of information that one can use during the trip in order to be more flexible.

The support of travel agents could be very helpful in cases of emergency - such as during a repatriation from abroad, which is then handled by the experts in a quick and convenient way.

What kind of technical equipment do older people take with on trips

The mobile phone is an essential element of the travel equipment of all participants of the focus group. Mobile phones make them feel safe: in a case of emergency: one can be reached and one can even give a call to someone. In most cases the mobile phone is only used for short message service (SMS) due to the high roaming costs.

A camera (in most cases a digital one) is also part of the travel equipment..

For three participants of the group the use of the internet is already an integral part of their journeys, whether via phone or internet with Laptop.

On the trip - what kind of information should be provided during the trip

Most participants of the focus group ensure that they do not need additional information and support during their trips. In case that additional information and support is needed, the participants ask for that at the reception of the hotel, at the tourist information or people on the street.

Basically, the group has the feeling that they intuitively can find everything they need, if they walk with open eyes and ears through a city. Those who are equipped with internet can act locally very flexible - for different reasons. (changing of the hotel, looking for a nice restaurant, etc.)

For emergency cases it was mentioned that one can call the international emergency line, but all participants pointed out the importance of taking out a travel insurance.

Travel insurance / medical care

In terms of travel insurance, the participants agreed: that a travel insurance should be took out before starting a trip – also because of the high cancellation fees if you can not make the journey. Regarding medical assistance: it was recommended by a participant to take the package insert with you while travelling. Even drugs are named different in foreign countries, one knows the ingredients which is most important. An other participant recommended the international pharmacies that can help in case of loss of certain drugs. .

To have access to the travel documents in case of loss a participant recommended storing copies on the internet.

Do older people like to share their experiences after the trip?

Experiences tend to be shared only with family and friends after a trip - in many cases only on request. Questionnaires from tour operators, hotels, etc. are filled out on request, positive and negative feedback is given. Social platforms are still not really used for sharing travel experiences – one participant mentioned that such information is too personal for the public.

Usage of TV

TV is only used very little on vacation, sometimes as a sleep aid or to zap through the channels , as background noise or because one is interested in local programs.

At home the usage of TV is different- zapping from one to another program, looking for interesting programs or select programs very selectively by using a program guide.

STIMULATE

The use of STIMULATE can be conceived by most of the participants of the focus group. STIMULATE could be a source of inspiration if you do not know what kind and where the journey should go to- depending on the query one can either select alphabetically by countries or one can start a search by using a keyword e.g "sun" to receive offers. The most important thing is that one gets information for a special target group but is not excluded from other information.

The participants do not really trust such a system yet – most of them would prefer to print out all relevant information. A backup in form of a printed version is appreciated – even because it is a habit.

During the discussion time and again, the question of costs was asked - on the one hand, who bears the costs for the STIMULATE system, on the other hand, which costs are arising from the use of the system - via phone, TV, etc. The participants fear the high roaming charges and the generally higher rates when using a smartphone.

Use of STIMULATE:

- **Remote control**: all participants know how to handle it, but if the keys are assigned to other functions this can cause confusion, but it is probably a matter of practice

- **Touchscreen**: directly the TV screen is rather rejected, but can be imagined via pad

  - **Keyboard:** would be nice, because one is used to work with it

  - **Gestures:** decisively no, very high level of scepticism in function

  - **Mobile phone:** mostly used to make phone calls and SMS - but audio feedback on the tour would be a very interesting site

  - **Pad:** at first refusal, on closer inspection, however, very positive agreement, because of the easy usage, (learning by doing), "all in one" is an interesting aspect, could be a substantial relief to the laptop.
    Points of criticism: a little bit too much information (i.g. 20 languages), can be used for gambling

  - **Smartphone**: huge and heavy, fonts are too small, but localization and automatic emergency call would be a very interesting tool on the smartphone
    Further interesting aspect: take photos with text, etc, one device for all

15.1.2. Summary and Results of Focus Groups in France

15.1.2.1.   Focus Group 3 in France

STIMULATE Project

Questionnaire addressed to seniors in order to improve useful assistance services for mobility and travel, through use of digital devices and technology.

With whom do you go on vacation?

Three categories of response:

 -- with one's spouse, children, a member of the family
 -- alone
 -- with friends

In general, a senior alone may either: travel alone, hoping to find someone on site with whom to share time during their trip, or; decide upon an interesting destination and find someone within their circle of friends and family and convince them to travel with them.

.
If a senior is still in a couple situation, it's a family trip, with travel options and destination a common affair.

What takes precedence: the person with whom you are travelling or the destination?

Seniors may travel with former colleagues. Communities which develop over the course of one's professional life are places to find friends with whom to travel.

The subjective significance or value of the destination may take precedence over specific travel partners. It's about the particular reason for wanting to travel. Why this country and not another? "A childhood dream".

Advice proferred in a travel agency can help with destination selection, provide assurance and instill confidence regarding destination, transport, accommodation, etc.

Organised tours are not for the majority of participants. Too many time constraints. Too rushed. Preference for clubs where one remains put and can benefit most. Optional activities not of essential importance to the trip. A network of people who can invite strangers is a way to choose a destination.

Is the language barrier a major obstacle to travel?
Language is not an insurmountable barrier. One can get by with basic English and sign language. No use of the Internet for translation.

Can you define a list of priorities for planning your vacation (from 1 to 10)?

1 Price
2 Length of stay (how long I leave my house unattended)
3 Climate | Weather | Optimal Season
4 Hotel facilities | Comfort
5 Contact with local populations | Projects with locals
6 Ecological footprint
7 Transportation resources | On-site mobility (bus, train, local transport and specific characteristics/requirements)
8 On-site health care (if heart attack, what hospital facilities on site?)
9 Projects on site | unconventional/alternative activities
10 The attractiveness of the destination. A childhood dream...

Which measures for booking transport?

For travel in France:

By train: For organising trips, seniors prefer the human contact at agencies or SNCF ticket windows/counters, especially for non-TGV (non high-speed) trains. Information thus provided is more precise, tailored and reliable (for ex., re switches, combinations,

explanations to get one's bearings, etc.) Internet ranks as a second choice only because it is too general.

Internet-organized travel
Carpooling (www.covoiturage.com | www.allostop.net). However, one must have time to use this type of transport. The combination "go by train, return by car" seems the best solution. It's a nice way to travel because it's a way to meet people.

For a trip to another country
The first impulse is to check out the low cost companies on the Internet in order to get an idea of prices and airlines serving the chosen destination (www.edreams.fr | www.bravofly.fr | www.kayak.com). For simple flight tickets, the main criteria are price and schedule. Warning: beware of hidden options! Sometimes a price comparison is made with the price on the official website of a pre-selected company. Nonetheless, the travel-agent relationship remains of prime importance. According to the online survey, seniors go in person to the travel agency in order to confirm all the details.

Focus on IDTGV
The comfort provided by this service: a quiet space to work or one for socialising. It's quite important to be able to choose the environment in which one wishes to travel.

Bad trip-planning experiences on the Internet
Travel ticket reservations billed/debited twice.
A train ticket booked for the month of November when it was supposed to be for December.
Hotel prices coupled with train or flight tickets are often more expensive than when booking the hotel separately.
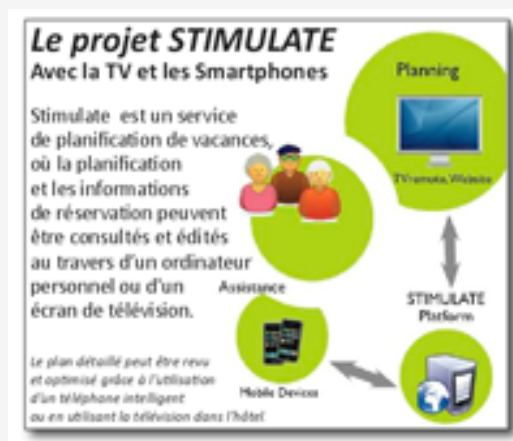
To what extent do you think such a system can help you plan your holiday?

Facilitator remarks:
Understanding the diagram is difficult. The seniors who met for the STIMULATE workshop are used to looking on the Internet for information about trips and vacations. The TV is suitable for watching TV shows. The evolution of uses related to the TV is more difficult to conceive

because it is older.

Television is mostly used today to watch broadcast programs. Some of the seniors who were present use their modem box to record programs. Only one uses the TV screen to view photos.

Only four of those present have a smartphone. The use of downloadable applications has not entered into common practice.

The STIMULATE project diagram as presented did not incur a favorable response. The only advantage would be to increase the size of the screen for better viewing.

Can you imagine using your TV to plan your vacation, find information about new places or create a vacationer-specific profile for yourself?

The idea of creating a vacationer profile is considered unusual. This question was quickly left aside.

A consensus was made for an ideal combination: pre-booking one's trip on the Internet or TV, sending the contract by mail and validating it by return mail.

The major disadvantage of the TV is that one cannot print documents from this device.

What one would like to find on a TV, Internet or Smartphone device:
All personal services in detail: taxi prices, places to find various modes of transport, porters and phone numbers, the correct times, real-time construction delay info., modifications of itineraries, ramps and lifts for people with reduced mobility, escalators which are out-of-order, actual travel times, emergency phone numbers, etc.

Various warnings: safe drinking water or not, local vegetables edible or not, etc.
Reliability rating system for a country's healthcare network.

What type of information would you like to see on the television in order to plan your vacation?
The same as on already-existing Internet websites:
- Price
- Destination
- Schedule

Televisions make for more comfortable viewing, if the information is well-organised.

What is off-putting about the Internet?
The manner of reading. There is too much to take in. It's too unstructured.
The direction of reading from left to right is not respected. One never looks where one should. Too much information.

When one goes to an agency, the agent sums up purchase-related information to the

client before confirming the purchase. With the Internet, anxiety arises from having to repeatedly confirm one's order, while hoping not to make mistakes.

Can you imagine using a mobile device to obtain assistance during your vacation?
Overall, the answer is no. Trips are prepared upstream and not on site. The cost of a smartphone remains a major obstacle. Also, there are health-related fears (radio waves can cause brain damage). Compatibility of international package deals remains a question mark and an obstacle to the idea of using the smartphone as an assistance tool in a foreign country.

Here again, reference to a catalog to prepare one's trip in detail is the most reassuring and agreed-upon solution.

Calling the consulate is also common practice in order to obtain information about current risks and health conditions in the country visited (http://www.diplomatie.gouv.fr/fr/conseils-aux-voyageurs_909/index.html).

The *Lonely Planet* travel guide is identified as a tool for preparing one's trips – a work of reference in its field.

What importance do you attach to the exchange of information about your trip? What restitution and how?

Little practice and use of.
Only one senior keeps their photos to view them on the TV.
An idea: to have a tool which enables users to improve the STIMULATE service – that everyone can criticize the information disseminated by STIMULATE in order to keep it up to date.

15.1.2.2. Focus Group 4 in France

Answers oft he second focus group
in Foyer „Buttes aux Pinsons" / Bagnolet
16/11/2011
11 participants

Remarks on this focus group :Whe had a group of people leaving in a suburb of Bagnolet , which has a lot of workers (middle lower classes)

They are quite traditionnaly oriented towards group traval offers , given by their (previous if retired) workplace.Some only go to the countryside where some family can welcome them.We made an intruction about the project and then they answered the form we had prepared (in French) ONLINE!

Here is the link to the questionnaire :

https://docs.google.com/spreadsheet/viewform?formkey=dFpIU19MWk1abndObmFxYzlXU1dqblE6MQ

Here is the link to the French answers :

https://docs.google.com/spreadsheet/gform?key=0AsGvwAAM3fY3dFpIU19MWk1abndObmFxYzlXU1dqblE&hl=fr&gridId=0#chart

Motivations/ Expectations

With whom do you prefer having vacation?

1 Either wife or husband (if couple)

2 With children

3- with friends

Are there particular reasons that people do not prefer going on vacation?

1 – financial reason

2 – health reason

How can these people be supported for travelling (language barriers, defining accessibitiy problems/health information, finding cheaper opportunities, other...)?

Good reason ist to find less expensive places to stay

BUT most people go with organized groups OR just go to stay with their family (in another town, for instance)

The Planning

How do you plan and prepare your vacation?

Either they go everyyear to the same place (eventually family house) or they look in a travel catalog (always the same = work company travekl catalog)

Can you define a priority list from A to Z? (You start with choosing the vacation destination/people with whom you go/vacation type?....)

For those who choose a group travel on a catalog, the first choice goes after the destination versus price

Some take into consideration the choice oft he friends with whom they want to travel.

They start by choosng the destination before the friends!

In the vacation

How does a typical vacation day look like for you?

They like to visit interesting sites and eat typical local food

They get up early

Like to go to restaurants

What kind of activities do you plan after you arrive to vacation place (concerts, daily trips?)

They like daily trips, eventually meet local people.

In your last vacation, can you remember a situation, where you needed some information and didn't find this that easily? Or didn't have an idea where to have this from?Please specify...

The problem comes very often from foreign languages

A dictionary is needed, even to get money out oft he bank

Other kind of problem : when nobody speaks French at the tourist office!

Definition of STIMULATE Project & Television & mobile devices usage

STIMULATE is a vacation planning service, where the planning and booking information can be seen and edited through usage of personel computer or television screen.The detailed plan can be seen and optimised via usage of a smart phone or by using the television in the hotel

In what points do you think such a system can help you organizing your vacation?(Planning, finding new vacation destinations, finding the cheapest opportunity…)

Essentially help to find an interesting and cheap destination

Can you imagine using your television for planning your vacation, finding informations about new places or creating a specific vaction profile for yourself? What kind of informations would you prefer seeing for planning your vacation?

Yes, they would like to see films on the destinations on the TV, so that they can make a choice!

What they miss is local information like

The last kilometer = bus transport : where/price/ timetable

Local maps

Local anilation or touristic circuits

Can you think of using your hotel's television for searching more information about daily trips, concerts or other activities, or optimizing your existing travel plans?

Yes they like this idea pretty much

Can you think of using a mobile device for getting support during your vacation? If yes: What kind of support informaiton would be interesting to have? (e.g: general informations on point of interests, a walk tour with audio support, the shortest walking path without stairs, next restaurant with specific diatery food...)

They would like to know :

-the shortest way without steps

-the fastest way

- Information about restaurants in the area

After the vacation

Would you prefer to exchange your experiences with other people or give recommendations for future vacations of the others?

Most accept to give information to others

Some want it to be „bidirectional"!

Do you keep a documentation of your vacations (collecting photos, creating a diary of your vacation...)?

1 – photo album

2 - notes = diary

3 – keep local paper documentation

Conclusion and Recommendations for STIMULATE

16. Summary of Implications from Literature for STIMULATE

The European population is becoming older and there have been many initiatives at European and National levels to promote active aging. In this context, 2012 will be the European Year of Active Aging and Intergenerational solidarity.

Tourism, as one of the most important economic sectors in Europe, offers great potentials for elderly users who are willing to stay active.

Among the needs to cater for elderly, studies have suggested that **security, safety, reassurance and comfort** of the users are key mobility needs identified by elderly users.

A technological travel assistant such as the STIMULATE Platform could be the solution to this and STIMULATE should provide solutions to these needs.

In the recent years, many experts have highlighted the great potential ICT-based solutions offer to elderly users and people with a disability if properly designed.

Studies suggest that elderly people make great use of the technology they are used to or of the technology they perceive as beneficial to them. Television is a technology widely used and accepted by elderly users and the emergence of interactive television offers new ways of interacting with technology.

Although less widely used by elderly people, they increasingly use the Internet as a way to find information. Recent studies have also suggested that a relatively high proportion of users above 60 make use of social networking sites on the Internet, suggesting that the social potentials offered by the Web 2.0 increases the attractiveness of the Internet for this segment of the population. In order to increase the attractiveness of the Platform, STIMULATE should offer possibilities to interact with other users and ways to increase sociability.

Data about use of smart phones and tablet by elderly users are unknown to the authors of this literature review.

In order to be widely adopted by the users, the solution that will be developed in the context of STIMULATE should follow a strictly-user centered approach.

Moreover, in order to be adopted by elderly users, these technologies should be sufficiently accessible to the target group. In this sense, in the design of the Platform, STIMULATE should follow the usability and accessibility standards and guidelines that have been developed by the WAI and other accessibility bodies and offer accessible solutions.

One should also take into account that the elderly are a heterogeneous group, which makes user-centered design even more relevant.

One should consider training the elderly in the use of technology to decrease any potential resistance towards technology.

Based on the outcomes of previous research on accessibility, it can be expected that providing an accessible solution would not only benefit elderly users but would also benefit all users.

STIMULATE should develop an easy and convenient usable solution based on the users' needs and design according to universal design principles.

It is also important to consider that even if technology exists and is effectively used, ICT systems may be incompatible with each other.

For example:

Even when technology exists and can be effectively used, ICT systems often don't talk to each other -or are difficult to assemble- due to lack of interoperability and standardisation. Therefore, services and solutions become abnormally costly and difficult to use for the ageing society and for people with forms of disabilities.

In many cases the public policies do not provide sufficient incentives for investments in innovation and efficiency increases, for example by allowing efficiency gains to be reinvested for a period of time. Furthermore there is often a split between health care and social care funding which creates both organisational problems and in some cases result in benefits achieved in a different area, than where the investments takes place.

17. Summary of Implications from Pre-studies, Expert Workshops and User studies for STIMULATE

The studies conducted here covered various aspects of the travel needs, values and routines of possible STIMULATE users. Additional to literature knowledge, here various

insights are gathered. The data is being analyzed and will be extracted to requirements in D.1.2.

As an outline, the following parts are expected to be defined in detailed:

In an abstract level of system acceptance:

- User value and motivations for using a system like STIMULATE, and implications for STIMULATE

- What should STIMULATE offer in order to be accepted

- What are the aspects that STIMULATE should avoid) (e.g: exclusive approaches for disabilities)

- What are the additional values that STIMULATE can offer to the travel-planning-market

- Various context scenarios where STIMULATE can support people

- Different modules of STIMULATE

- Broader implications of using such systems

On user profiles:

- Possible users of the STIMULATE system and services

- Heterogenity in user types and their needs, motivations, activities

- Travel and planning preferences of different user types

- Daily travel and planning routines of possible users

- Needs and preferences of users

On market level:

- possible wider stakeholders of STIMULATE system and services

- the extention potentials of the services and communication needs

- value chains and innovative contributions for making STIMULATE a success

On technical aspects:

- needs for technical and sematic accesibilty, consistency and simplicity

- needs for communications with existing systems (search, plan optimization…)

- problem and risk management due to lack of technology (data connection, roaming)

<u>On interfaces:</u>

- Possible interfaces and their usage contexts (in different environments)

- Possible information design and priorities for different steps

- Off-the-shelf products and their potentials for the group

- Appropriateness of new interaction ways for selected group and context

- Usage of color, graphics and interactive elements on different interfaces

<u>On interaction:</u>

- existing interaction routines and conflict points

- offered interactions and their broader acceptance (e.g: touchpad on the move)

<u>On design and consumer preferences:</u>

- look and feel of new-technology in tourism context (seasonal factors)

- connecting to world through television (entertaintment+info+friends)

- consumer preferences, visibility and agency of the product

All these aspects and broader issues are going to be discussed in D1.2. Moreover, based on this document initial scenarios will be created and evaluated.

18. General Notes and Ownership Information

This document and related studies introduced here are results of collaborative work. Involved partners in the creation of the document D1.1 are: TUW (leading partner), EUR, ESEN, HKU, DMMR, AFC.

Regarding preperation and conduction of studies, the initial survey outline is created by TUW and distributed, which included outline for the study. This document is edited in a collaborative way. The Qeustionaire outline was used for expert workshops. The Focus Group outline is created separately by TUW and EUR, based on the initial outline from TUW. The FG Outline is refined after Austrian FGs and revised version in English is sent to ESEN.

All the general texts between different sections, where an authorship is not noted are created by TUW. The authors of sections are as follows:

Section	Owner Affiliation	Author(s)
Executive Summary,ToC	TUW	Özge Subasi
Focus of the Deliverable	TUW	Özge Subasi
Relevant Literature	HKU, TUW, EUR	See sections below for details
Seniors in EU, Austria and France, Tourism and Mobility (1.)	TUW	Özge Subasi
Examples to Tourism and Accessibility Studies from France and Austria (1.1.1)	TUW	Özge Subasi
Senior Mobility Needs & New Technologies (2.)	HKU	Marilla Valente
Aging Well and New Technologies (3.)	HKU	Marilla Valente
Senior and Television usage, IP and Social TV, interaction (4.)	HKU	Marilla Valente
Mobile Devices And Elderly (5.)	HKU	Marilla Valente
ENAT and Accessibility Guidelines and Relevancy for STIMULATE Interfaces (6.1.1,6.1.2 –EUR),	EUR/TUW	Eva Reithner
Open Platforms (6.1.3)	TUW / summarized from previous docs	Özge Subasi,
Requirements, Needs and Values of Potential STIMULATE Users Intro (7.)	TUW	See sections below for details

Methodology and Procedures (7.1.1)	TUW	Özge Subasi
Ethical Issues for STIMULATE User Involvement and Observational Studies(6., 6.	TUW	Özge Subasi
Detailed Information and references to Ethical Issues that applies to STIMULATE Project (7.1.2)	ESEN	Monique Epstein,Wladimir Annywald, Philippe Uziel
Inclusion criteria and informed Consents (8.)	EUR/ESEN	Eva Reithner, Monique Epstein
Methodology and Procedures for expert workshops(9.)	TUW	Özge Subasi
Examples to Design Methods, Backgroud to target groups (9.1.1, 9.1.2)	TUW	Özge Subasi
Expert Workshop 1 Results (13)	AFC	**Martine** Defosse-Quinett
Expert workshop 2 (14)	DMMR	Guy Scialom
Summary and Procedures for Focus Groups(15)	TUW	Özge Subasi
Summary of Focus Groups 1 and 2 in Austria (15.1.1)	EUR	Eva Reithner
Procedure and Results of Focus Groups in France (15.1.2)	ESEN	Monique Epstein,Wladimir Annywald, Philippe Uziel
Results from self-prototyping and non-participant observations in the field (11.)	TUW	Özge Subasi
Results from pre-survey (10.)	TUW	Özge Subasi

Summary of Implications from Literature for STIMULATE (16)	HKU	Marilla Valente
Summary of Implications from Expert Workshops and User studies for STIMULATE (17)	TUW	Özge Subasi
Annex: Informed Consent Austria	EUR	Eva Reithner
Annex: Expert Workshop 2 DMMR Outline	DMMR	
Annex: Interview Transcription	DMMR	
Annex: Focus group Outline	TUW, all	Özge Subasi (Ed.)
Edition of All-Versions, formatting etc.	TUW	Özge Subasi

Table 3 Ownership Information

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Appendices

18.1.1. Appendix 1: Informed Consent Austria (EUR)

EINVERSTÄNDNISERKLÄRUNG

Projekttitel: STIMULATE – Sustainable E2 Mobility Services for Elderly People

Koordinator:	Dr. Djamel Khadraoui, CRP Henri Tudor, 29, Avenue John F. Kennedy, L- 1855 Kirchberg, Luxembourg
Projektpartner Österreich:	Eva Reithner
Institution:	EURAG Österreich
Finanziert von:	FFG
Programm:	benefit
Call:	AAL – 3rd call
Projektnummer:	829313
Projektdauer:	24 Monate
Projekt Start - Ende:	Sept, 1st, 2011 – Aug, 31st, 2013

I. Projektziel:

Das Projekt "STIMULATE" zielt darauf ab, unabhängiges Reisen für Menschen über 55 mit Hilfe der Nutzung eines neuen Informations- und Kommunikationssystem zu vereinfachen. „STIMULATE" kann helfen, eine Reise umfassend zu planen, Transportmittel und Reiseverlauf zu optimieren, und - wenn benötigt – Hilfestellung vor Ort, aber auch während der Reise Empfehlungen (wie Einkaufsmöglichkeiten, etc.) anbieten.

II. TeilnehmerInnen des Projekts:

Diese Einverständniserklärung beinhaltet Information über die _____ Wie möchten sicherstellen, dass sie gut über die Ziele des Projektes informiert sind und auch über ihre Teilnahme an der Studie. Wenn sie Fragen haben, können sie diese jederzeit stellen.

- Die Teilnahme an der Studie erfolgt auf freiwilliger Basis. Sie können jederzeit ohne Folgen aussteigen.
- Kriterien, um an dieser Studie teilzunehmen:
  Alter: über 55 Jahre
  Interessiert am Reisen

III. Vorgehensweise

Im Zuge des STIMULATE Projekts werden Personen der gesuchten Zielgruppe eingeladen, an Fokusgruppen, Interviews, Labor- und Feldstudien teilzunehmen. Hierbei haben die TeilnehmerInnen die Möglichkeit, ihre Bedürfnisse und Wünsche in einer sehr frühen Projektphase einzubringen. Später wird es die Möglichkeit geben, erste Prototypen zu testen und die Meinung zu Handhabung etc. abzugeben, verschiedene Funktionen auszuprobieren und mittels Fragebogen oder Interview zu bewerten. Dies alles fließt in die Weiterentwicklung und Optimierung des Systems ein. Diskussionsrunden (Fokusgruppen), Studien im Labor und Feldstudien werden für Auswertungen aufgezeichnet (Bild und Ton)

IV. Risiken

Es sind keinerlei Risiken für die Teilnehmer vorgesehen.

V. Vorteile

Der persönliche Nutzen aus der Teilnahme an jeder Studie des Projekts ist, dass sie einen wesentlichen Beitrag zur Entwicklung von Zukunftstechnologien mit Schwerpunkt Verbesserung der Lebensqualität Iterer Menschen und Unterstützung eines unabhängigen Lebensstils leisten. In jedem Fall werden die Daten, die in dieser Studie gesammelt werden, dazu beitragen, ein verbessertes und umfangreicheres Wissen und Verständnis für die Wünsche und Bedürfnisse der älteren Menschen sowie ihr soziales Umfeld zu bekommen und zukünftige Entwicklungen sollen zu einer Verbesserung der Lebensqualität beitragen.

VI. Vertraulichkeit

Das STIMULATE Projekt gewährleistet:
- **Anonymität**: das gesamte gesammelte Datenmaterial wird nicht mit der Person, von der es stammt, in Verbindung gebracht. Es wird auch nicht möglich sein, ihre Teilnahme an der Studie nachzuverfolgen.
(lt.. "Bundesgesetz zum Schutz personenbezogener Daten (Datenschutzgesetz 2000 - DSG 2000)": "
- **Sicherheit**: jedem Nutzer von STIMULATE wird garantiert, dass es bei der Benutzung zu keinen Schäden kommen kann
- **Selbstbestimmung**: jedem Teilnehmer an der Studie wird garantiert, jederzeit aus der Studie aussteigen zu können und auch jederrzeit die Daten, die in Bezug mit seiner Person stehen, zu kontrollieren.

Wenn sie sich aus dem STIMULATE Projekt zurückziehen, werden ihre anonymisierten Daten aber für das Projekt weiter verwendet. .

Die Genehmigung für die Nutzung und Verbreitung der von Ihnen anonym gemachten Angaben ist vollkommen freiwillig. Es ist aber notwendig, dass sie uns ihre Zustimmung geben, dass sie an dieser Studie teilnehmen.

VII. Kontaktperson
Für weitere Information über ihre Rechte als TeilnehmerIn oder wenn es irgendwelche Fragen gibt, bitten wenden sie sich an:

EURAG Österreich
Eva Reithner
Curlandgasse 22
1170 Wien
Tel.: 01/ 489 09 36
Mail: eurag@eurag.at

VIII. Bestätigung

Ich habe die Information in diesem Dokument gelesen bzw. Ist es sie mir vorgelesen worden. Meine Fragen bezüglich dieser Studie wurden beantwortet.

Kreuzen sie bitte an:

__Ich habe diese Information gelesen
__Die Information wurde mir von:………………………………..vorgelesen

Meine Fragen wurden von………………………………………beantwortet

Ich erlaube dem angeführten Projektpartner die Nutzung und Analyse meiner Antworten für die oben angeführten Zwecke. Die Unterzeichnung dieser Einverständniserklärung bedeutet nicht den Verzicht auf jegliche Rechte. Ich mache freiwillig an dieser Studie mit, die von EURAG Österreich und den restlichen Projektpartnern durchgeführt wird. Ich habe das Recht auf eine Kopie dieser Einverständniserklärung daher wird mir eine Kopie ausgehändigt.

Name und Vorname

……………………………………………………………………………

Datum

……………………………………………………………………………

Unterschrift TeilnehmerIn

……………………………………………………………………………

Name und Vorname des Projektpartners

……………………………………………………………………………

Datum

……………………………………………………………………………

Unterschrift Projektpartner:

……………………………………………………………………………

IX. Foto-, Video und Tonaufzeichnung

Die Studie wir geleitet von:

EURAG Österreich
Eva Reithner
Curlandgasse 22
1170 Wien
Tel.: 01/ 489 09 36
Mail: eurag@eurag.at

Als Teil dieses Forschungsprojekts werden bei dieser Studie Fotos, Videos und Tonaufnahmen gemacht.

Ich habe eine ausführliche Beschreibung der Ziele und Verfahren für alle Aufnahmen erhalten und ich gebe meine Einwilligung, dass EURAG Österreich die Aufnahmen oder Teile der Aufnahmen für die Analyse, Studien und Projektergebnisse sowie für Marketing-und PR-Zwecke verwenden darf. Ich nehme zur Kenntnis, dass alle Informationen streng vertraulich behandelt werden und in anonymisierter Form berichtet wird.

Name und Vorname des/der TeilnehmerIn

……………………………………………………………………………………………

Datum:

……………………………………………………………………………………………

Unterschrift TeilnehmerIn

……………………………………………………………………………………………

Name und Vorname Projektpartner
……………………………………………………………………………………………

Datum:

……………………………………………………………………………………………

Unterschrift Projektpartner

……………………………………………………………………………………………

18.1.2. Appendix 2: Expert Workshop 2 DMMR Outline (DMMR)

ENQUÊTE DANS LE CADRE D'UN PROJET DE RECHERCHE EUROPÉEN SUR LA MOBILITÉ DES SENIORS.

Dans le cadre d'un projet européen sur la mobilité des seniors en vacances, cet échange a pour but de nous aider à mieux définir les aides que l'on peut apporter à un public fragilisé par l'âge ou à ses accompagnants pour les aider à préparer leur séjour, à en profiter et à en faire un bilan à leur retour.

0.1. *Quel nombre de vacanciers seniors partent avec vous par année ?*

0.2. *Quelles sont les différentes catégories de population seniors qui font appel à vos services et dans quel pourcentage ?*

0.3. *Quelles évolutions (éventuelles) des demandes avez-vous observées ces 10 dernières années ?*

1.0 PRÉPARATION DU SÉJOUR

1.1. *Quelles sont les motivations et les inquiétudes des seniors pour prendre des vacances et en quoi sont-elles différentes de celles des plus jeunes?*

1.2 *Quelles sont (par type de public) les spécificités de ces demandes (mode de transports, activités culturelles ou sportives, temps de prise en charge quotidien, destination, voyage en groupe ou individualisé, soleil en hiver, cures thermales, croisières…)*

1.3 *Avez-vous des demandes émanant de seniors handicapés ? En quoi cela change-t-il le séjour proposé ? Quelles sont les contraintes particulières ?*

1.4.1 Les seniors sont-ils fidèles? Quel pourcentage de client revient ?

1.4.2 Par quel biais vos nouveaux clients vous connaissent-ils par ordre d'importance ? (caisse de retraite, magazines, recommandations, internet, agences de voyages, clubs sociaux, autres…)

1.5. Y-a-t-il des spécificités quant aux modalités de réservation ? Anticipation, besoin d'un contact téléphonique plutôt qu'internet, demande de documentation…

2.0. PENDANT LE SÉJOUR :

2.1.1 Quelles informations les seniors veulent-ils avoir sur leur destination ? Météo, confort hôtelier, proximité centre urbain, intérêt culturel, touristique etc
2.1.2 Les seniors veulent-ils avoir des informations sur l'offre de soins dans le lieu où ils vont ?

2.2.1 Les voyageurs seniors planifient-ils leurs excursions eux-mêmes ou s'en remettent-ils à l'équipe d'animation ? Dans quelle proportion ?
2.2.2 En fonction de quels critères complémentaires choisissent-ils une excursion? (confort ? coût ? durée ? proximité ? sécurité ?)

2.3.1 Quelle proportion de senior fait appel, selon vous, aux nouvelles technologies pour planifier leurs activités ?

2.3.2 A quelle technologie font-ils majoritairement appel ?(sites web, centre d'appel, GPS, paiement en ligne …)

2.4. Quelles sont les problématiques liées à l'âge de vos clients que vous rencontrez le plus au cours de vos séjours ?
Comment solutionnez-vous actuellement ces problèmes ?

3.0. APRÈS LE SÉJOUR :

3.1. Les seniors vous font-ils part de remarques spécifiques concernant l'adaptation du voyage à leurs difficultés ? Lesquelles ? Cela a-t-il modifié votre offre ?

3.2. Selon vous les seniors éprouvent-ils le besoin de garder une trace de leur voyage et sous quelle forme ? (photos, souvenirs, partage d'expériences, de critiques, réseaux sociaux)

3.3. Les seniors répondent-ils plus ou moins facilement (que les autres vacanciers) aux enquêtes de satisfaction de Vacances bleues ? Quels sont les points caractéristiques ? (suggestions, plaintes récurrentes etc)

Damien Blum
Chargé de mission pour DMMR

Document faxé à Madame Marianne Yung préalablement à l'entretien téléphonique.

18.1.3. Appendix 3: Interview Transcription (DMMR)

Bonjour Mme Marianne Yung, vous êtes directrice marketing et communication de Vacances Bleues. Je vous remercie par avance de répondre à nos questions visant pour l'association « Dessine-moi mon Répit » destinées à mieux cibler les attentes émanant de la population des seniors.

Quel est le public cible de Vacances Bleues ? Combien de vacanciers partent avec

Vacances Bleues chaque année ?

Nous accueillons au total 200'000 clients par an. En séjour de vacances, on en accueille 70'000. Nous avons aussi une offre 'séminaire' qui concerne plutôt une clientèle d'affaires, des clients 'courts séjour' qui réservent directement dans les hôtels et des groupes.

Concernant les séjours de vacances, nous accueillons 70.000 vacanciers dont 40'000 seniors. Les voyageurs des groupes sont aussi en majorité des seniors, bien que nous n'ayons pas le décompte exact de cette population.

Vos hôtels ne sont donc pas spécifiquement « étiquetés » Vacances Bleues, vous

accueillez tout type de clientèle ?

Oui absolument, ça fait une dizaine d'années, que V.B. a compris qu'elle devait diversifier son offre face à la nouvelle clientèle. Le produit ne correspondait plus à la demande.

V.B. s'est adaptée pour accueillir une clientèle d'affaires, en leur offrant des lieux adaptés à l'organisation de séminaires de plusieurs jours ou des journées d'étude, mais également une clientèle 'corporate' de professionnels qui se déplacent professionnellement et qui cherchent des hôtels en centre ville.

V.B. a aussi diversifié son offre vacances destinée à la nouvelle génération de retraités, via une offre famille destinée notamment à accueillir « grands parents petits-enfants » voire trois générations en même temps, ce qu'on appelle l'offre « tribu » cela nécessite des hôtels-clubs avec une offre d'activités diversifiées, un mini club etc.

V.B. a aussi développé une offre Hôtellerie classique française ou étrangère qui réserve directement à l'hôtel ou via des vendeurs internet Expedia, Booking, Facebooking

Vous l'avez compris, nous allons nous concentrer aujourd'hui sur la population 'senior'. Est ce que, au milieu de la grande famille des seniors, il y a des catégories particulièrement démarquées?

Les catégories que nous avons identifiées se distinguent particulièrement par leurs comportements, en fait :

D'une part les seniors 'traditionnels' plus anciens, -que l'on appelle les « tradi », très fidèles et très attachés à V.B. revenant d'une année sur l'autre au même hôtel à la même période (par exemple je viens à Menton à la fête des citrons), voire plusieurs fois dans l'année sur des séjours différents. Nous avons 7'000 foyers très fidèles qui viennent au moins une fois par an, soit environ 25% des seniors en séjour individuels et ce, malgré qu'ils râlent un peu sur place !

D'autre part, les seniors plus 'actifs', jeunes retraités, dont un des membres du couple peut encore avoir une vie professionnelle, voire des gens qui prolongent leur activité au-delà de l'âge de la retraite. Actifs et en pleine forme, leurs comportements sont totalement différents. Ils peuvent consommer plusieurs séjours mais des produits complètement différents par exemple une location au ski en couple suivi d'un séjour de 4 jours avec des amis à Prague et une semaine avec leurs enfants voir leurs petits enfants dans un hôtel club avec beaucoup d'activités et d'animations.

Cette catégorie refuse d'être assimilée 'senior', il faut, en tout cas pas, les démarcher comme ça. C'est un public très difficile à fidéliser, ils sont beaucoup plus 'volatiles', ils

peuvent consommer un produit puis aller voir ailleurs même si ils sont très satisfaits. Ce sont des gens qui ont toujours voyagé, qui connaissent une offre de vacances ou de loisirs très variée, donc qui veulent découvrir de nouvelles choses, différentes activités sportives, de détente, de balnéo, de découverte des alentours, très consommateurs de services sur l'hôtel. Cette population viendra également plus facilement en septembre qu'en août pour des raisons de prix, mais leurs comportements sont finalement assez proches de celui des gens actifs.

Quelles sont les évolutions des demandes des seniors que vous avez observées dans les dix dernières années ?

Les évolutions récentes observées sur le marché sont principalement liées à l'arrivée de cette nouvelle génération, qui a des demandes complètement différentes. Alors nous, on a fait évoluer de nombreux services. Les gens veulent qu'on leur propose, non qu'on leur impose ! Ils vont 'picorer' au gré de leurs envies, excursions de groupe ou individuelle, cours de gym, un soin, tournois de tennis une plus grande amplitude horaire d'ouverture des bars, piscines et restaurants. Ca nous demande des équipes qui soient pro actives, dynamiques. Ca nous demande de nous adapter et d'adapter les services. Par exemple, la restauration : Avant, les gens attendaient l'ouverture du restaurant à 19h, maintenant, ils vont prendre l'apéro, arrivent plus tard au repas, donc ça demande des horaires plus souples, des équipes plus nombreuses. Les gens veulent pas forcément être servi à l'assiette, mais plutôt choisir sur un buffet. Ca nous demande d'être en perpétuelle évolution, à l'écoute du client.

Pour nous, cela demande une équipe plus nombreuse, dynamique qui mette les activités en avant, qui soit active et à l'écoute de leurs demandes et qui sache adapter les services pour être performant et avoir un produit qui reste à la page.

Nous devons aussi faire cohabiter cette population avec nos autres cibles, notamment la famille très en demande de clubs enfants, tout en ayant une offre de prix adaptée de façon à optimiser notre remplissage. Nous avons aussi dû enrichir considérablement notre offre et doubler notre catalogue avec de nouveaux hôtels ou locations pour essayer de fidéliser cette nouvelle clientèle et lui proposer plus de destinations en restant au sein de notre enseigne Par exemple j'étais la semaine dernière dans un hôtel de cent quatre vingt chambres à Hyères qui était plein (première semaine d'octobre). Cela demande

d'aller chercher toute cette clientèle et d'adapter les services proposés aux périodes, ce ne sont pas les mêmes pendant les vacances scolaires que hors vacances. Ce sont des évolutions fortes qui ont fait que l'on a complètement changé notre produit.

Quels étaient les groupes de population représentés ?

La population se composait principalement de seniors mais de toutes les catégories.

Il y avait par exemple, à côté de la clientèle de séjour classique, un groupe 'séjour danse de salon', un 'stage VTT', quelques personnes actives.

Les seniors 'tradi' sont-ils encore votre cœur de cible ?

Ca dépend des hôtels, nous avons un établissement à Menton qui est une ville qui attire peu les clientèles familiales, mais ou on va trouver des gens qui recherchent de la villégiature plus traditionnelle qui va se mélanger avec une clientèle italienne qui vient passer quelques jours pour se faire plaisir. Les mois de février ou mars sont aussi plus favorables à l'accueil d'une clientèle de seniors 'tradi'

Ce qui fait la différence entre les deux groupes, c'est la manière de choisir le concept de séjour : les tradi à la recherche du tout compris, qui se laissent guider pendant le séjour et les seniors actifs qui, eux, veulent l'offre la plus complète possible mais se réservent la possibilité de choisir au jour le jour...

Qu'en est-il des voyages en groupe ?

Dans le cadre des voyages en groupe, ce qui représente quand même 15% de notre chiffre d'affaires, tout est pris en charge avec un programme d'excursions, un accompagnateur, beaucoup plus d'encadrement, il s'agit souvent de séjours organisés par des associations de type 'bridge', qui se connaissent et qui souhaitent un programme tout construit.

Vous allez plutôt proposer du « all inclusive » à votre public senior ?

Comme je vous l'ai dit, le mot senior n'a plus tellement de sens.

Nous avons des séjours de remise en forme offres 'all inclusive', en Alpes du Sud par exemple, avec jusqu'à 5h30 d'activité par jour de yoga, de Do-In méthode d'auto

pression de Qi Gong, de relaxation, de Taï chi chuan. L'après-midi, on va proposer de la randonnée ou des activités en autonomie avec piscine et sauna. Le programmeest pré établi mais chacun choisit d'y participer ou non.

Avez-vous une demande de la part d'un public de seniors handicapés ?

Pas énormément, on en a. On a des hôtels plus ou moins bien adaptés à ce type de public, donc on va plutôt les orienter vers la structure la plus adaptée. Mais ces demandes sont marginales. On adapte au cas par cas.

Par quel biais vos clients vous connaissent ?

Nous avons à peu près 30% de nouveaux clients par an.

1) Le bouche à oreille : Le plus important. Très fort taux de satisfaction, donc, les clients en parlent à leur entourage

2) Internet, avec un site qui a près de 2 millions de visiteurs annuels. Nous jouons donc la carte du référencement, faisons des campagnes de bannières, sommes présent sur des plateformes d'affiliés, on fait un petit peu d'achat de mots clés google

3) Les revendeurs, (MACIF, CAMIF, ALIZEE, MAAF) donc des gens qui ont des catalogues qu'ils envoient à leurs adhérents dans lesquels il y a des offres V.B

4) Campagnes Marketing via des encarts dans la presse Nous avons 4 agences de voyage V.B. (Paris, Lille Lyon Marseille). Nous ne travaillons pas avec les agences de voyages traditionnelles : Les essais que nous avons faits n'ont pas été probants, car les agences demandent des marges importantes, de la formation, de l'animation de réseau, et nous n'avons pas opté pour cette stratégie.

Est-ce que vos clients 'seniors tradi' utilisent internet ?

Bien sûr, notre clientèle internaute est plus jeune que ceux qui ne l'utilisent pas. Mais tous les gens au-dessous de 70 ans ont une adresse mail, les 75 /80 ans, moins, évidemment. Donc, dans notre clientèle tradi de moins de 75 ans, nous avons des internautes.

Ils utilisent de plus en plus internet, mais pas forcément pour réserver. Nous envoyons des news letters toutes les semaines, les seniors vont attendre la promo parce que c'est le comportement qui est aujourd'hui partagé par tout le monde, ils vont aller voir sur le site,

mais après, ils vont appeler et concrétiser la vente par téléphone. De façon générale, beaucoup de ventes se concrétisent par téléphone, car les gens demandent souvent beaucoup de précisions sur l'hôtel ou les chambres contrairement à une location qui est un produit plus 'banalisé'. Les gens font facilement des devis en ligne mais préfèrent avoir la finalisation de la vente au téléphone avec un conseiller qui va bien les conseiller, les rassurer sur leur achat.

Quelles sont les questions qui vous sont le plus fréquemment posées au niveau de lieu de villégiature ?

C'est plus sur la manière dont est organisé l'hébergement :

La manière dont est organisée l'hébergement, distance de la réception, activités à l'intérieur de l'hôtel, lesquelles sont accessibles gratuitement, ce qui est mis à disposition, Tout ce qui concerne les activités extérieures, ça se discute plus sur place, mais au téléphone, le choix de l'hôtel se fait sur les activités proposées, la qualité et l'organisation de l'hébergement et du restaurant.

On peut estimer que les seniors qui partent avec vous restent beaucoup à l'hôtel **?**

Oui, ils restent beaucoup à l'hôtel. S'ils sortent, c'est tout seul, parce que nos établissements sont souvent en centre ville, mais c'est rare, ou ils sont dans le cadre d'excursions. Pour les plus jeunes, ils ont la voiture et ils vont se balader, mais ça n'empêche que même si vous choisissez d'aller vous balader, vous voulez savoir tout ce que vous propose l'hôtel.

Concernant les activités extérieures, les gens cherchent leurs informations où ? A l'hôtel ?

Les gens se renseignent effectivement auprès du personnel de l'hôtel, mais aussi à l'office de tourisme. Ils auront regardé avant sur internet pour ceux qui sont plus jeunes. C'est la préparation du voyage une fois qu'ils ont réservé. Par exemple à Paris pour tout ce qui est musées, les gens ne demandent absolument pas avant de réserver l'hôtel, ils se débrouillent par eux-mêmes, et c'est une fois sur place, éventuellement, qu'ils se renseignent sur le moyen d'y aller. Les gens sont de plus en plus autonomes.

Les spécificités non abordées au niveau des tradis notamment par rapport à la dépendance ?

Non parce que nous, on est dans les vacances. La problématique des gens qui sont dans la dépendance, des gens plus âgés, c'est pas des gens qui sont dans la démarche de partir en vacances ! Donc ça nous concerne pas.

Après le séjour, Quelles sont les réclamations les fréquentes ?

Les horaires, l'animation. Malheureusement, l'animation, elle n'est pas partagée par tout le monde : certains en veulent plus, d'autres moins, certains plus forts, d'autres moins forts, certains voudraient des animations dans le bar, d'autres dans des pièces à part. Les attentes sont très différentes d'une personne à une autre. En conséquence, nous essayons de proposer un maximum d'animations différentes à des endroits différents. Nous faisons évoluer nos hébergements en fonction des demandes. Les gens sont sensibles à nos efforts pour améliorer leur qualité

d'hébergement.

Une de nos spécificités est de ne pas jouer sur la valeur immobilière de nos établissements, nous investissons dans leur rénovation plutôt que de chercher à les revendre pour faire un bénéfice, ce qui permet d'avoir une offre constante d'une année sur l'autre. On a une approche d'exploitation, on investit beaucoup dans la rénovation, on fait évoluer le produit.

Comment les seniors gardent- ils trace de leur séjour ?

On a créé une page facebook. Il y a des partages de photos et de témoignages sur notre page Facebook, même parmi les seniors, car il y a des seniors très actifs sur FB. Certains échangent leur numéro de tel ou leurs adresses mail et continuent à communiquer comme ça. Nous avons même des gens qui se sont rencontrés à l'hôtel et qui se sont donné rendez-vous sur un séjour équivalent l'année suivante à V.B.

Quelques mots sur vos questionnaires de satisfaction ?

Les gens répondent très facilement avec un gros taux de réponses et un taux de satisfaction supérieur à 90%, et nous allons doubler ces enquêtes par mail pour ceux qui n'auraient pas pu le remplir sur place.

18.1.4. Appendix 4: Focus group Outline (TUW)

WP 1 Focus Group Guidelines for E-seniors and EURAG

Preparation Activities:

Please prepare a comfortable room for discussion
Consider ethical rules of your country
Prepare a balanced list of discussion members according to their interests
Prepare slides or presentation to support the discussion and frame the scope of discussion
Prepare two copies of informed consents with clear user language for each participant

Slide 1: Introduction
Introduce shortly the persons from your organisation

Slide 2: Outline
Introduce clear outline of shortly the persons from your organisation

Aim of focus group
Discussion rules
Informed Consent
Discussion

Slide 3: Discussion Rules and Informed Consent
There is no wrong answer
Introduce rules on anonymity, recording and keeping of data
Informed Consents

Slide 4: Motivations

Why do you plan to go to a vacation? Waht kind of motivations do you have?
What do you expect from vacations?
Which time frames do you prefer for your vacations?

Slide 5: Vacation Types

What kind of vacations do you prefer?
How long does an ordinary travel take?
Where do you prefer to go for vacation?
With whom do you prefer having vacation?

Slide 6: Expectations

What do you expect from a satisfying vacation?
Which role do hotel, restaurant, the place relevant activites play?
Are there particular reasons that people do not prefer going on vacation?

Slide 7: The Planning

How do you plan and prepare your vacation?
How do you conduct details of the planning and booking of your trips?
Where do you get relevant informations for vacation opportunities?
Which way of transportaion do you mostly prefer?
Are there activities where you need some professional's help?
What kind of technical objects do you take with you during your vacation?

Slide 8: In the vacation
How does a typical vacation day look like?
Which kind of information do you need during the trip in the destination place?
Are the situations, of you needed some information and didn'T find this that easily? Or didn't have an idea where to have this from?

Slide 9: After the vacation
Would you prefer to exchange your experiences with other people or give recommendations for future vacations of the others?

- BREAK-

Slide 10: Definition of STIMULATE Project
STIMULATE is a vaction planning service, where the planning and booking informaiton can be seen and edited through usage of personel computer or television screen.

The detailed plan can be seen and optimised via usage of a smart phone or by using the television in the hotel

Slide 11: Discussion on new interactions/possibilities

Here possible interactions will be introduced to the group and will be discussed in relation to STIMULATE project
Gesture interaction, remote control, touch screen, mobile interactions (audio feedback), augmented reality, haptic feedback, physical computing