PACITA-project

„Ageing Society” scenario workshop in Hungary

(MTA Main Building July 4 2014)

PACITA

Collaborative project on mobilisation and mutual learning actions in European Parliamentary Technology Assessment

Grant Agreement no. 266649
Activity acronym: PACITA

Activity full name:
Parliaments and Civil Society in Technology Assessment

Deliverable 6.6 a
National report
Scenario workshop
in Hungary

Due date of deliverable: July 2014
Actual submission date:

Start date of Activity: 1 April 2011  Duration: 4 years

Author(s): Judit Mosoni-Fried
Organisation name of lead beneficiary for this deliverable:
The Secretariat of the Hungarian Academy of Sciences
## Change Record

<table>
<thead>
<tr>
<th>Version</th>
<th>Date</th>
<th>Change</th>
<th>Author</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.7</td>
<td>21.07.2014</td>
<td>First version of report from national workshop in Hungary</td>
<td>Judit Mosoni-Fried</td>
</tr>
<tr>
<td>0.8</td>
<td>22.07.2014</td>
<td>Comments and corrections</td>
<td>Katalin Fodor</td>
</tr>
<tr>
<td>0.9</td>
<td>24.07.2014</td>
<td>Comments and corrections</td>
<td>Gergely Böhm</td>
</tr>
<tr>
<td>1.0</td>
<td>25.07.2014</td>
<td>Final version</td>
<td>Judit Mosoni-Fried</td>
</tr>
</tbody>
</table>
PACITA Partners
Teknologirådet – Danish Board of Technology (DBT)
Toldbodgade 12, DK-1253
Copenhagen, Denmark,
Contact: Marie Louise Jørgensen
mlj@tekno.dk
www.tekno.dk

Karlsruhe Institute of Technology (KIT)
Kaiserstr. 12, 76131 Karlsruhe, Germany
Contact: Leonhard Hennen
leonhard.hennen@kit.edu

Rathenau Instituut (KNAW-RI)
Postbus 95366, 2509 CJ Den Haag, the Netherlands
Contact: Geert Munnichs
pacita@rathenau.nl/g.munnichs@rathenau.nl
www.rathenau.nl

Teknologirådet – Norwegian Board of Technology (NBT)
Kongens gate 14, 0152 Oslo, Norway
Contact: Marianne Barland
marianne.barland@teknologiradet.no
www.teknologiradet.no
The Institute of Technology Assessment (OEAW/ITA)

Address: Strohgasse 45/5, A-1030 Vienna

Contact: Mahshid Sotoudeh, Pacita-ITA team

pacita.ita@oeaw.ac.at

www.oeaw.ac.at

Applied Research and Communications Fund (ARC Fund)

5 Alexander Zhendov str., 1113 Sofia, Bulgaria

Contact: Zoya Damianova

zoya.damianova@online.bg

www.arcfund.net

Instituto de Tecnologia Química e Biológica- Institute of Technology of biology and chemistry (ITQB)

Avenida da Republica, Estacao Agronomica Nacional,

Oeiras, 2784-505, Portugal

Contact: Mara Almeida

marasilvalmeida@gmail.com

www.itqb.unl.pt/
The Catalan Foundation for Research and Innovation (FCRI)
Pg. Lluís Companys, 23, ES-08010
Barcelona, Spain
Contact: Belén López
belen.lopez@fundaciorecerca.cat
www.fundaciorecerca.cat

Swiss Centre for Technology Assessment (TA-SWISS)
Brunngasse 36, CH-3011 Berne, Switzerland
Contact: Danielle Bütschi
danielle.buetschi@ta-swiss.ch
www.ta-swiss.ch

Association Knowledge Economy Forum (KEF)
Galvydzio 5/96, LT-08236, Vilnius, Lithuania
Contact: Edgaras Leichteris
edgaras@zef.lt
www.zef.lt

Technology Centre ASCR
Ve Struhach 27, 160 00 Prague 6
Contact: Lenka Hebakova
hebakova@tc.cz
Scientific and Public Involvement in Risk Allocations Laboratory (SPIRAL)

Boulevard du Rectorat 7/29, B31, 4000 Liège, Belgium

Contact: Pierre Delvenne
pierre.delvenne@ulg.ac.be
www.spiral.ulg.ac.be/

University College Cork (UCC)

Western Road, Cork, Ireland

Contact: Dr. Ciara Fitzgerald
cfitzgerald@ucc.ie
www.ucc.ie

Secretariat of the Hungarian Academy of Sciences (HAS-SEC)

Nádor utca 7, H-1051 Budapest, Hungary

Contact: Katalin Fodor
fodor.katalin@titkarsag.mta.hu
www.mta.hu
Legal notice:

The information in this document is provided as is and no guarantee or warranty is given that the information is fit for any particular purpose. The user thereof uses the information at its sole risk and liability. Neither the European Commission nor any person acting on behalf of the Commission is responsible for the use that might be made of the following information.

© PACITA 2012. Reproduction is authorised provided the source is acknowledged.
# Table of Contents

Executive Summary .................................................................................................................. 9  
Introduction .............................................................................................................................. 11  
  National context ..................................................................................................................... 12  
  Legislation and regulations ................................................................................................. 13  
  General conditions ............................................................................................................... 15  
  National Strategy for the Elderly ......................................................................................... 16  
  Local players in the care sector ............................................................................................ 17  
  Civil organisations in providing assistance ......................................................................... 18  
  Technological status and development ............................................................................. 18  
Stakeholder workshop in Hungary .......................................................................................... 21  
  Preparations .......................................................................................................................... 21  
  Recruitment process and participation ................................................................................ 21  
  Organisation of the workshop .............................................................................................. 22  
  Responses to the scenarios .................................................................................................. 24  
First group session: a comprehensive overview of the 3 scenarios (Phase 1) ..................... 26  
  A general overview of Scenario 1 ......................................................................................... 26  
  A general overview of Scenario 2 ......................................................................................... 27  
  A general overview of Scenario 3 ......................................................................................... 27  
Second group session: Detailed assessment of scenarios (Phase 2) .................................... 28  
Third group session: Analysis and synthesis of visions and recommendations (Phase 3) ... 29  
Key elements of the visions of elderly care for 2025 ........................................................... 30  
Alignment with national policies .......................................................................................... 35  
Feedback and reflections on the methods used at the scenario workshop .......................... 36
Executive Summary

One of the greatest challenges of our times is the rapid growth of the proportion of the elderly within the total population count worldwide, thus in Europe too. By 2030, about one quarter of the population of the European countries will be senior citizens. According to the forecasts of the Hungarian Demographic Research Institute of the Hungarian Central Statistical Office that trend is held valid in this country too.

To meet this demographic challenge one has to get prepared both at an individual and at a social level. It is the responsibility of the decision-makers that such preparations should be made in possession of appropriate knowledge and comprehension. To that end it is essential that a dialogue be carried out between the representatives of sciences, the society and politics.

The objective of PACITA (Parliaments and Civil Society in Technology Assessment) consortium financed in the 7th FWP of the EU is to provide support to the process of making decisions in policies and to contribute to the foundations of decisions related to the future. One of the model projects is dedicated to the problems of „Ageing society” and it examines the role of info communication (ICT) technologies in the life of elderly people who for health reasons cannot lead an independent life without significant support, but who prefer living in their own homes to becoming institutionalised in an old people’s care home.

In order to run a dialogue on the subject the consortium has worked out three possible visions for 2025 called scenarios. In scenario 1 the government takes a lion’s share in developing and financing the technologies and services supporting an elderly lifestyle, in scenario 2 individual choices and means of financing are decisive, while in scenario 3 the use of volunteering carers dominates. On the basis of the three scenarios the participants of the project in Austria, Belgium (Wallonia), Bulgaria, the Czech Republic, Hungary, Norway, Spain (Catalonia) and Switzerland, ventured to put in words, using a novel method devised to debate the projected scripts of running scenario workshops, the visions and policy alternatives that they deemed both viable and desirable in their respective countries.

As a member of the consortium the local scenario workshop was organised by MTA (Hungarian Academy of Sciences) Secretariat. The 46 participants of the workshop invited to the debate represented policy and local government decision-makers, employees of health and social care institutions, technical people, researchers and representatives of civil societies and enterprises with a stake in the elderly care sector.

Results

The vision of a desirable future of the participants of the workshop is far from matching the present state of affairs. A model of multiple actors activating (involving) a broad spectrum of society would be more desirable, it was concluded, as opposed to what is called a paternalist state in charge of decisions on eligibility, telecare technologies and organising the related services. But this does not mean that the state (i.e. whatever government is in office) is relieved from its responsibilities. It is the duty of the government to provide the fundamental or baseline services, their financing, the infrastructure and the legal framework in this model. One of the most urgent tasks is to clarify responsibilities and to delegate them rationally.

A critical element of a new system is the capability to preserve the dignity of the elderly and a new view on life: make mental, physical and financial preparations for the elderly age starting from as early years as possible.
General messages expressed in the visions:

- Individuals, societies and decision-makers must have greater awareness of the prospect, that - pursuant to the rapid increase of the number and proportion of elderly people with declining health - the responsibilities concerning the provision of care for the elderly in Hungary are also on the increase.

- Individuals, societies and decision-makers must have greater awareness of the fact that there are a number of technologies and services available to the needy and to their family members. In principle, this enables elderly people who can handle technical devices, to continue living independent lives in their own homes.

- It is a duty for the educationists, trainers and instructors to make people aware from their early childhood of the importance of cooperation and that of providing charity/voluntary work.

What is considered a novelty according to the participants of the workshop is that the role of (local) communities in elderly care is to grow drastically by 2025. The stakeholders believe that the most humane system is one that is capable of adjusting to specific individual needs. Instead of centralised state-run solutions, community provided care should be given more attention than what is given today. It (community care) tends to build and strengthen social groups, it makes the active elderly involved, creates new (and relatively cheap) jobs, for instance for the educated jobless and recent retirees. Wherever it is feasible this form of care should be preferred.

The spread of the community model in the short run is hampered by the fact that in the Hungarian society the behaviour patterns and models based on doing voluntary and charity work and the practice of helping the needy are scarce (nevertheless they exist). To make them more accepted and more widely used the following priority actions should be taken:

- Teach voluntary/charity tasks in families and at schools;
- train volunteers (carers) through central and local government programs;
- clarify the responsibilities and rights of volunteers;
- provide technological infrastructure for community driven assistance in care provision;
- provide psychological assistance for (voluntary) carers (coping);
- Make local governments be responsible for training and assisting carers. That should include the provision of finances needed to that end.

The role of the private sector in elderly care to provide services above the baseline care services will not change. However, although no significant growth of demand is envisaged by the experts in this respect until 2025, many of them shared the view that more and more people will want elderly care services that go beyond what is standard today. As concerns the private sector’s care service activity, the state is expected to provide regulation, standardisation, control, and in case of developers, the funding of innovation through grants giving.
Introduction

The increased rate of growth of the ageing of the population, a trend that prevails in Hungary too, entails a number of social consequences. The model project „Ageing society” within the PACITA project (Parliaments and Civil Society in Technology Assessment) started in 2011 within the 7th FWP of the Union is dedicated to the examination of one aspect of the issue.¹ The core of the inquiry is the identification of opportunities provided by info communication (ICT) technology for the elderly people who would like to keep their independence in their own accommodation, but who for health reasons are not capable of doing it on their own, without receiving some assistance, of technical nature in particular.

The future of an independent lifestyle supported by technological devices may be envisaged in a number of ways. Several alternatives are available even with regard to a short period of the ten years to come. It is not immaterial for the individuals or the political decision-makers which alternatives to regard today as feasible, and within that which ones are deemed to be desirable according to stakeholders.

Within the PACITA project three alternative visions or scenarios were discussed in the last few months in nine PACITA-partner countries. The scenarios represent three different policy alternatives with different consequences to individuals, the closer or wider communities and to the amount of social burden. The time horizon of the visions is: 2025. In scenario 1 government responsibility is paramount; in scenario 2 the individual affected makes his contribution by selecting and financing the technology available, in scenario 3 volunteering carers are dominating. In the workshops held in the nine countries the same three scenarios were discussed by the participants who worded their own vision of the future along those lines. The interim outcome was very exciting, and stimulating comparative analyses are expected after the processing the responses in the countries concerned (Austria, Bulgaria, Czech Republic, Denmark, Catalonia – Spain, Hungary, Norway, Switzerland, Wallonia - Belgium). The PACITA partners hope that the outcome would be utilised at Union and national levels.

The workshop held in Budapest was organised by the Secretariat of the Hungarian Academy of Sciences (MTA). Confidence in MTA in Hungary must have been a factor in the fact that as far as we can tell the number of participants in the workshop was the highest of all comparable workshops along with the fact that this workshop had the most varied composition in terms of professional background. Excellent professionals came together and had very good talks in a good atmosphere; groups seeking consensus and solutions got together, people, who believed that the problems of an ageing society must be urgently dealt with. New aspects emerged, new knowledge was generated thanks to thinking together, and that can be channelled in the preparation of policy decisions. And that was exactly the aim of the model project.

¹ Homepage of PACITA Project: http://www.pacitaproject.eu/
National context

According to population projections made by demographers European trends are relevant for Hungary too: the number and proportion of the over 65 people are on an ongoing increase within the population. In 1990 the number of people in that class was 1.4 million, currently (2014) their number is 1.7 million, and in 2025 over 2 million people, mainly retired people are expected to be around. This means that in ten years’ time about one quarter of the population of Hungary will be over 65 (KSH, 2014).²

Figure 1

Demographic description: Hungary
The number of 65+ population projected in three versions
(in terms of base, low and high) figures


The proportion of the 80+ inhabitants in Hungary is 3.5% at present. That figure is lower than the average in the counties of the European Union, where it is between 4 and 5 %. Their number and proportion is a significant indicator especially from a health care point of view. According to statistical data most people stay relatively healthy until they turn 75-80, when health problems tend to increase. Without an ongoing system of care their healthy condition is not sustainable.

It is not easy to give an overview of the current state of elderly care in Hungary. Some surveys are known, but they seem to relate to certain regions only. The overview of responsibilities is also problematic, because a number of organisations have in their scope of activities the care for the elderly, but this functionality does not have a dedicated (supervising) organisation that is accountable for the field. Naturally, legislation exists to regulate elderly care, but the problems are too big and complex for such a fragmented system of regulation and responsibilities, or for such a volatile legislation with an annual frequency of amendments to be suitable for handling the situation. The implementation of the Strategy for Elderly People adopted in 2009 by the Parliament has halted to give way to the development of a new strategy, which is still underway.

We have compiled the summary (national context) mostly from legal regulations, surveys and studies available on the internet to help the assessment of the outcome of the scenario workshop in Budapest. We have also used the information that has been sent from the Social EU and International Division of the Ministry of Human Resources (Emberi Erőforrások Minisztériumának Szociális Európai Unió és Nemzetközi Főosztálya), in conjunction with the State Secretariat Responsible for Family and Youth Matters (Család- és Ifjúságügyért Felelős Államtitkárság) and the State Secretariat responsible for Social Issues and the Promotion of Egalitarianism (Szociális Ügyekért és Társadalmi Felzárkózásért Felelős Államtitkárság) in the above mentioned Ministry with respect to their scopes of responsibilities. Several researchers active in the development of telecare technologies have also honoured us by answering our questions. This is an acknowledgement of their contribution and saying thanks to the people who have willingly responded to our query.

### Legislation and regulations

The legislative foundations of home care are found in Act III. 1993 on Social Administration and Social Care Provision (hereinafter: Szt.), and Decree No. 2/1994. (I. 30.) of NM (Ministry of Welfare). The Act referred to specifies, among other things the responsibilities associated with the provision of baseline care for the elderly, including care work, and even shows an effort to develop a network of social care. It introduces the provision of home care with the assignment of an emergency alarm button system (EABS), as a state responsibility (Para 65. § Section (7)). The implementation of the law however has met many difficulties. E.g., the local governments that were drawn in the implementation tried to evade their responsibilities on a number of grounds in the early nineties. Zsuzsa Széman, one of the best known Hungarian researchers of the subject says that there were many reasons for that. For instance: a deteriorating financial power of the local governments; political reasons (legal and physical provisions that were rooted in the period prior to the changeover to capitalism were refused); economic policy was preferred to social policies; feeling of social responsibility and sensibility was lacking (Széman, 1994). The concept of home care was defined in the Decree No. 2/1994. (I.30.) NM stipulating that: this form of care allows the beneficiary to maintain an independent lifestyle in his/her original dwelling. The decree has been amended several times

---


with more emphasis on providing care in the home of the beneficiary, but experts believe that the demographic challenge is still not met in the regulation (Jeneiné, 2004).5

The type of care to be offered is determined by the family doctor (GP). The following forms are recognised: care, healthcare, establishment and maintenance of the relation between the beneficiary and the professional carer, participation in maintaining personal environmental hygiene, assistance in running a household and keeping in touch with the environment. An amendment to Szt. was published in 1997 for those living in the countryside that made it possible for the “village caretakers” (falugondnok) to provide care services for the elderly (in addition to being a “delivery boy, or office help”).

In 2004 Hungary joined the eHealth Action Plan initiative of the European Commission. e-Health has become adopted in the ICT program intended to modernise healthcare in Hungary. Within the new Széchenyi Plan (a government investment and development project – translator’s note) the related ministry has worked out an e-Healthcare strategy (for 2004-2007).

The Government approved the Semmelweis Plan on the development of public health care in 2011. A separate chapter is dedicated to the options for ICT developments in health care. Among the goals of the operative program already launched the development of local e-health solutions is stipulated which could help the proliferation of telemedicine services. A part of the program is dedicated to mapping out the areas where shortages of qualified labour that is the business of HR in health care and related services are affected (NEFMI, 2011).6

Also in 2011 an expert report was produced with a separate chapter on the issue of the introduction and distribution of telemedicine in Hungary (GYEMSZI, 2011).7 The authors of the study believed that in association with most of the applications issues of financing, security (operation, standardisation, legal regulation) are raised, the solution of which is not in sight in Hungary or elsewhere in the short run. Experts recommend a model that unites community and market elements, a mixed bag. “No service above the simplest device (alarm push button) is deemed to be viable nationally without public financing in Hungary. Because of the shortage of money for the time being one can envisage pilot projects only,” the expert view was stated. However interest is very high in the research and development quarters, within that information technology application development in the health care, and there are a number of telecare and telemedicine oriented projects ongoing. Most of them are run under international cooperation and financing deals.

The provision of home care complete with an emergency alarm button system (EABS) is the duty of the government. For a long time, the local government was responsible for operations, but from 2012 the EABS duty belongs to the central government, to its respective department. On the basis of Para 4/A of Government decree No. 316/2012. (XI. 13.) Korm. on the Government Division of Social and Youth Protection (Szociális és Gyermekvédelmi Főigazgatóság) it is the duty of that government division to provide an emergency alarm button system (EABS) for home care, by contracting out the services of its own organisation or device management as stipulated under Act Szt. Para 91.§ (2) in an agreement on acting for and on behalf of the obliged party by providing social services and signing an agency care service agreement. Typically, the provision of services is done by the local governments,

pursuant to an agreement signed with that government division. Since 2012 the local governments are not obliged to organise (provide) such services, but they may do, provided that they come to an agreement with that Government Division. Anyone in want of care must apply for it. Submissions are tested. Whoever makes use of the services will pay a fee: that is capped as 2% of his/her monthly income.

Home care with an emergency alarm button system (EABS) is a baseline service in social care. “This service is provided for elderly or handicapped people or psychiatric patients who live in their own home and are eligible for the service because of their social and/or health conditions, and are capable of using the EABS system, whenever they encounter a crisis situation while still maintaining an independent lifestyle.” Within home care with EABS it must be provided that a) the site must be visited by the person on duty without delay (within 30 minutes from the time of the emergency call) in response to the emergency call made by the beneficiary, b) the steps necessary in order to solve the problem that made the call justified must be immediately executed, c) any further steps to secure social or health care service as required shall be taken. Home care based on the EABS system is operated on a continuous basis of surveillance by a competent person on call duty.8

**General conditions**

Several surveys have been conducted in Hungary recently on the provision of care for the elderly, but the amount of data processed is relatively small (Gyarmati, 2013)9. According to legislation the organisation of the provision of personal care is the responsibility of the local governments. The provision of baseline services is obligatory for all local governments. The forms, the beneficiaries and any potential compensation for the care provided are decided by the local government by issuing a decree. The rights and the protection of rights of the agents taking part in providing personal care are legally regulated. Elderly people however live such an isolated life that 51% of them did not consider themselves informed about their options to ask for help, according to a survey made in 2004. (Papp, Balogh, 2006).10 Assistance provided by family members is usually limited to making arrangements on behalf of the needy old person: they are trying to secure a vacancy for the family member in an old people’s home. Short of any survey about the demand it is difficult to assess the actual amount of need for care, but it looks sure that the number of people who receive regular care from the system is a lot lower than the number of people who need it. In 2010 75 thousand citizens received home care (assistance). 51 thousand people lived in old people’s homes (Gyarmati Andrea). Often the elderly are temporarily hospitalised, if they fail to look after themselves. But using hospitals for social care as opposed to using it for health care does not make sense for the health care system or the social care system either (Lajkó, 2009).11

---

10Papp Katalin – Balogh Zoltán (2006): Requirements by the Elderly for future care services. Az idős emberek elvárásai a jövő gondozásával és szolgáltatásával kapcsolatban. ESKI Közlönyek, 2006/06
30% of the 70 years old or older population live in single person households. Nearly half of this group has a problem that troubles his/her daily life. 2.52% of the 65+ citizens receive home care. The proportion of the people who make use of the emergency EABS system is below 1% in the 70+ age group (Nemzeti Idősügyi Stratégia – National Strategy for the Treatment of the Elderly).12 In that case limited financial resources of the elderly to afford that type of care cannot be a problem, because the EABS device is available free of charge for those who need one.

**National Strategy for the Elderly**

The Parliament adopted the National Strategy for the Issues of the Elderly until 2034 in 2009. Many years prior to that strategy a so called Charta for the Elderly (Idősügyi Charta) was published in 2001, which had been prepared in alignment with international resolutions and comments. The production of both the Strategy and the Charta was urged by the Council for the Issues of the Elderly (Idősügyi Tanács). The council was established in 2002 pursuant to a government decree.13 The Council is an advisory body to the government that provides opinion, recommendations, assessment and coordination in certain issues. It is chaired by the Prime Minister and its vice chairman is the respective minister responsible. It has a mandate for the period that the government is in office. The work of the Council for the Affairs of Elderly is currently (2014) coordinated by the Division of Elderly Affairs and Old Age Pension (Idősügyi és Nyugdíjbiztosítási Főosztály) that is under the control of the government secretariat responsible for Social Policies in the Ministry of Human Resources.

In 2009 the following objectives were set:

- to make the expected lifetime at birth match the average in the Union,
- to increase the number of years spent in healthy condition,
- to increase the number of years spent in active life,
- to create security of income in elderly years,
- to strengthen social integrity,
- to harmonise the various services (health care, social, educational, cultural, etc. services) by considering the needs and interests of the elderly and those growing old,
- to support lifelong learning by the elderly, by making digital course materials available,
- to strengthen the conditions of „ageing actively,” which does not mean physical activity only, or staying longer in the labour market, but active participation in social, cultural and civic life too,
- to spread the word of the „management” of the ageing process in one’s early youth,
- to change the view of society with respect to the social and financial assessment and appreciation of ageing.


13 Gov. Decree No. 1138/2002. (VIII.9.) Korm. határozat
No action plan was prepared for the Strategy of 2009.

In 2012 further amendment to regulations were made with respect to the provision of social care. Since then it is the government’s duty to provide permanent care in old people’s home. The provision of social care for the elderly in their own home has remained the responsibility of the local governments.

The provision of professional home care is still in its infancy. Family members however may receive a fee for becoming a carer. Despite the low fee paid it is an opportunity for a family member to make caring a paid job with social insurance. It would be nice to establish a back office system for ancillary services to support such family carers (Gyarmati, 2013). No mention is found however in the professional literature either of how important it would be the application of telecare technologies from the family’s point of view as well. This is not part of the public discourse despite the fact that in Hungary there was a successful program in place for several years on the possibility of technological assistance of an independent lifestyle. The eVita program started in 2008 (eVita National Technological Platform - Nemzeti Technológiai Platform) joined the European AAL joint program too. Within that setting a lot of knowledge and information were gathered in recent years on distance care, telemonitoring, telecare, etc. systems. As far as the research and development entities and service providers are concerned they find no technical problem in the application of telecare technologies in Hungary. Limits are attributed to a poor level of “informedness,” the lack of technological knowledge with a considerable portion of the elderly and low level of liquid demand. A further problem is that for the time being the care of the elderly is not supported by a so called detailed assessment of status of the needy, which would reveal what a prospective beneficiary of home care is capable of doing and what he/she is not with respect to self-care and getting on alone. In training for health care and social care this assessment methodology should be made part of the curriculum, professionals suggest (Szabó, 2014).15

Local players in the care sector

The provision of care for the elderly people in the current system is more like a social than a health issue, although some overlapping is obvious. It is not clear though whether you talk of a centralised or a decentralised system, if you look at the provisions of legislation. Centralisation is obvious from several marks such as old people care homes, but organising the care provisions is mostly done by the local governments. One of the most urgent tasks is to clarify responsibilities and delegate them rationally, as it was heard from the participants of the scenario workshop.

The top actor in the system is the Ministry of Human Resources. Within the ministry several departments and divisions are assigned to the issue of elderly care. For instance, the provision of home care with the emergency alarm EABS is a government job and it belongs to the scope of the Social and Protection of Youth Division (Szociális és Gyermekvédelmi Főigazgatóság) since July 1 2013. Also involved in elderly care are the Division for the Elderly and Pensions (Idősügyi- és Nyugdíjbiztosítási Főosztály), the Division for Health Policies (Egészségpolitikai Főosztály), and GYEMSZI, the Institute for the development of the quality and the organisation of Pharmaceutical and Health actors (Gyógyszerészeti és Egészségügyi

15 Szabó Lajos (2014): The role of professional staff and carers in the home care of the elderly. A professzionális és informális segítők szerepe az idősek otthoni ellátásában. Esély 2014/2. szám
Minőség- és Szervezetfejlesztési Intézet), all active under the auspices of the ministry. The later hosts the e-health program so they are authorised to control telecare.

In organising the provision of care services the local governments have a direct role. Most of them provide financial support for the eligible (free medicine, financial aids, living allowance). Some of the local governments provide care by establishing (building) a centre for social services. Home care is used to give priority to provision of care in old people’s home. Home care means: physical and mental assistance of the beneficiary and providing an emergency alarm system (EABS), if required.

Example: In Ferencváros, a district in Budapest, in 2008 107 people, in 2011 218 people received home care. 30 citizens received an emergency alarm system (2008) first, and 57 citizens later (2011). 18% of the population of the district is over 65. Their number in 2011 was nearly 10 000. 16 In total about 2% were provided home care in 2011.

**Civil organisations in providing assistance**

At the end of the nineties about 20% of the institutionalised elderly care was provided by the civil sector (Gyarmati, 2003). This figure is likely to contain the contribution of family members as carers (informal helpers). When we categorise here an organisation as a civil one, we mainly think of the entities that took part in the scenario workshop, namely.

- The Hungarian Red Cross Organisation
- Hungarian Society for Gerontology and Geriatrics
- National Association of Retired Citizens
- Pensioners Clubs and the National Association of the Elderly „Életet az éveknek” (Years to Life)
- National Federation of the Association of Hungarian pensioners
- Budapest Association of Pensioners
- Hungarian Federation of Patient Organisations

And by any means not to be left out: the Hungarian Maltese Charity Service.

In recent years the organisation of voluntary work programs for young people to help the elderly was started. In some locations, for example in District 5 in Budapest a program to „visit the elderly and lonely” was launched, and a „senior consulting program” was prepared so that ageing citizens should also be available to help in the elderly care system.

**Technological status and development**

Pursuant to its being a government liability the EABS devices dominate the local system of home assistance (scores of thousands of units). The models are highly varied. What is expected to come next is the standardisation: a central selection of the technology for the sake of economising. Non official sources claim that private service providers of telecare have only a few thousand subscribers. Experts believe that this figure would increase considerably if the

---

place and function of telecare and telemedicine services in the health (and social) care systems were made clear at government level. Another important step forward would be the connection between the private service providers that collect health data generated by telemeter technologies of patients and family doctors, and maybe between the patent record systems of hospitals. This would strengthen the need for government (external) supervision demanded emphatically by the participants of the workshop.

There are about 8 to 10 businesses in Hungary that have got a department for the development of telecare and telemedicine software and/or devices. But as far as we can tell fewer and fewer businesses are involved in providing telecare and/or telemedicine services. In the table below you will find just a few companies and a civil organisation that are involved in the development or the provision of telecare products and/or services.

Table 1

<table>
<thead>
<tr>
<th>Name of Service Provider</th>
<th>Date Introduced</th>
<th>Objective</th>
<th>Type of Service Provider</th>
</tr>
</thead>
</table>
| MOHAnet Zrt (since 2009: MOHAnet Mobilsystems Zrt) | 2006 | The company runs „partner programs” to participate in the development and application of elderly care systems. Its best known product is Vario MedCare. Vario MedCare is a mobile care personal monitoring/inspectoral device which provides security and supervision (emergency) while giving assistance in every-day tasks and daily routine. Using the device can significantly help remote monitoring of home therapy treatment (administration of metering, medication, fluid intake, etc.), which cuts down the time spent in hospital undergoing rehabilitation. MOHAnet-Telemed book system was launched in 2013.

The MOHAnet Telemed book is a telemedicine solution which supports and inspires the medical/health screening of health conscious people. The screenings are available at the screening points. The signals are transferred by the multiuser data transfer device/unit (Vario MedCare) using M2M technology to the Telemed book health book portal. The people with whom the user shares data or the e-Consulting rooms (doctors) get a permanent access to the posted data and they can order limit values to it. | private company |
<table>
<thead>
<tr>
<th>Organization</th>
<th>Year</th>
<th>Description</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROMEDCOM Kft Medistance service</td>
<td>2010</td>
<td>Runs a telemonitoring system for elderly care. Will measure and transfer data on blood pressure, blood sugar content, cholesterol and triglyceride values, ECG episodes and signals to family members or the family doctor.</td>
<td>private company</td>
</tr>
<tr>
<td></td>
<td></td>
<td>With the aid of the Medistance service you can continuously monitor your relatives’ blood pressure and blood-glucose data from any point of the country. Following the measurements the blood pressure and blood-glucose values get into a web medical log via a mobile connection where the relatives or the healthcare professionals can monitor the measured values without personal presence. The system offers continuous control for elderly people being nursed at home.</td>
<td></td>
</tr>
<tr>
<td>Mentőtárs Életmentő Gyorsszolgálat</td>
<td>2007</td>
<td>Provides telecare solutions that support independent living in Hungary.</td>
<td>private company</td>
</tr>
<tr>
<td>Hungarian Maltese Charity Service</td>
<td>1994</td>
<td>The organization aims to provide home care services to pensioners with severe social or medical conditions. Day care is provided by social workers, who regularly visit elderly people and assist them to make their lives easier (shopping, medical escort, feeding, etc.) 50 personal alarm devices are used with the most needy, low-income pensioners living without family and help. They provide 24-hour assistance. The alarm button ensures that required assistance is provided on-site as fast as possible.</td>
<td>donation supported charity organization</td>
</tr>
</tbody>
</table>
Stakeholder workshop in Hungary

The venue of the scenario workshop organised to discuss the possible scripts and future visions was the main building of the Hungarian Academy of Sciences. Date of event: July 4 2014. Number of participants: 46.

Preparations

In the course of preparations we collected surveys, studies, technological and domain policy information (legislation, strategies on e-health systems, ICT developments and applications, etc.) that had been produced in Hungary on the subject of the ageing society and the care of the elderly.

We translated the scenarios prepared for the workshop (PACITA: Scenarios on Ageing Society. What choices do we have?). The original photos were kept to emphasize that the basis of the discussion in the workshop are the scenarios that had been written by the PACITA consortium with the shared objectives in mind of the project.

Recruitment process and participation

The workshop was organised by the staff of the Secretariat of the Hungarian Academy of Sciences, in particular, its Secretariat for International Relations (NKT). NKT prepared the list of people to be invited, by making use of the list of the participants available on the internet of the eVita project, a government financed programme on ICT in the service of daily living. We have received a list of participants active in the development and the utilisation of the services of distance monitoring systems from the staff involved in the subject at the Budapest University of Technology and Economy. The list was very useful in selecting prospective participants.

The department for health policies of the Ministry of Human resources (Emberi Erőforrások Minisztériuma Egészségpolitikai Főosztálya) helped us inform the officials of the ministry active in health care and social care functions about the PACITA project and the scenario workshop with the participation of MTA Secretariat. Two delegates from the ministry took part in the workshop debates. We invited several members of the local governments and the competent heads of a number of national government agencies and authorities as domain politicians. Par excellence politicians (MPs) were not invited to the workshop, but several of them were earlier interviewed on the objectives of the PACITA project, and within that on the potential benefit of institutionalization of technology assessment in Hungary.

The venue of the workshop was in the main building of the Hungarian Academy of Sciences. Being known on the one hand as the main representative of Hungarian science and being recognised on the other hand as the institution leading the list of institutions in terms of the level of confidence vested in them by the public here, MTA was not just a prestigious site for the melting point of a wide spectrum of professional people and a wide spectrum of civil organisations to discuss a great challenge. MTA took a supportive stand by opening the event through a speech given by Professor Lajos Vékás, MTA Vice-President, Social Sciences. Emphasising the scientific and societal importance of the subject he pointed out that in addition to research into the subject, MTA is also ready to facilitate a social dialogue on the ageing society issue.
We targeted to have 35-40 participants in all, trying to make them represent a varied composition of professions. We thought it was very important that physicians, nurses, care organisers as the employees of local governments, and social care institutions, researchers, engineers and entrepreneurs active in technological development and services, experts participating in decision making support be invited and the views of civil organisations representing the elderly and researchers involved in the study of the subject matter (demographers, sociologists) also be heard.

The total number of persons (whom the Secretariat contacted): 69
The number of people accepting the invitation and who registered: 52
Number of participants in the workshop: 46

Table 2

<table>
<thead>
<tr>
<th>The distribution of participants in the workshop by institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ministries, national authorities (state administration)</td>
</tr>
<tr>
<td>Local government and agencies of local government</td>
</tr>
<tr>
<td>Health care and social care agencies (state, church, NGO)</td>
</tr>
<tr>
<td>Enterprises, companies</td>
</tr>
<tr>
<td>University, R&amp;D institutes</td>
</tr>
<tr>
<td>Civil societies (organisations representing the elderly and their family members)</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Organisation of the workshop

In working out the detailed program for the workshop the experiences of the countries that had already completed their workshops and summarised their information in writing with respect to organising the event were observed. Especially helpful for us was the Script for Moderator prepared by ITA (Institute of Technology Assessment of the Austrian Academy of Sciences). We used the Script to write up our detailed program to prepare the moderators and the one week before the workshop was started. Most of them were PhD students volunteering for the job.

Prior to the workshop we sent only the Hungarian translation of the three scenarios to the participants. The moderators received the list of participants, the list of people allocated to groups and a list of extra questions that were deemed to help understand the goals of the workshop.
In the organisation stage of the work we were pleasantly surprised to find

- the amount of interest in the issue of an ageing society;
- the appreciation of those invited of the opportunity for receiving new information through an event like this one,
- The extent of the confidence of the social partners in what is heard when this meeting is organised and hosted by the MTA.

The number of those registered (52) and the number of those who turned out (46) was an undoubtable proof of the interest generated in the workshop. Six groups were formed. They were all composed of people with similar background as follows:

Table I: Decision-makers in domain policies – local and national
Table II: Researchers, engineers and experts
Table III: Experts, researchers – social scientists
Table IV: Business Companies
Table V: Institutions and organisations as players in elderly care and health care
Table VI: Civil organisations (organisations representing the elderly and their family members)

Program

8.30 – 9.00 Registration
9.00 – 9.15 Opening: Professor Lajos Vékás, Vice-President of the Hungarian Academy of Sciences
9.15 – 9.45 Plenary session: The presentation of scenarios (ppt show)
9.45 – 10.30 First group session: Impressions on the three future scenarios (Phase 1)
10.30 – 10.45 Coffee break
10.45 – 11.45 Second group session: A detailed assessment of the scenarios (Phase 2)
11.45 – 12.30 Plenary session: Presentation of the output of the second group session
12.30 – 13.30 Lunch
13.30 – 14.45 Third group session: Reporting on one’s own vision of the future (Phase 3)
14.45 – 15.00 Coffee break
15.00 – 15.45 Plenary session: Presentation of the future vision of each group
15.45 – 16.00 Closing
Responses to the scenarios

In general terms participants regarded the scenarios as a point of departure and a facilitator and not as a specific picture of the future. They did not address details or personal stories. Apart from the researchers and engineers dealing with telecare and the enterprises, the participants were less concerned with the technological issues or aspects of the scenarios. Basically, participants addressed only three fundamental properties of the scenarios and the differences between them. Namely, those as follows:

**Scenario 1.** The main message is a normative government subsidy providing a minimum of safety and central organisation and the provision of a „one size fits all” package of tools for “the distance care” of the elderly.

**Scenario 2.** The essence is to rely on market players and one’s own financial resources in obtaining the technology designed to assist an independent lifestyle.

**Scenario 3.** The bottom line: the self-organising power of the community to be complete with some kind of state subsidy.
„Bonus assignment”: A short written assessment of the three scenarios during the start-up lecture

On registration participants were asked to fill in a questionnaire. On an A4 sheet three questions were asked with respect to all the three scenarios:

- Do you think this scenario is feasible?
- Would it be good, if it was implemented?
- What are the cons and pros for this scenario to materialise?

These are basically the same question as the ones heard in the First group session (Phase 1) after the presentation.

A total of 37 questionnaires duly filled were returned. Most of them were an answer of one or two sentences long, a statement of appreciation. They seem to lead to the following conclusions:

**Scenario 1**

Feasible, subject to a number of preconditions. Indispensable model. A minimum level of provision must be defined that should be available unconditionally to those in need.

Because of the high proportion of the low-income people, this is necessary without doubt. It should be rated as a baseline service to be complemented by other systems of service provisions.

Pros: Offers a feeling of security in a home environment. Easy to implement, provided that there is a will and money at a national level.

Cons: Not custom made. It tends to preserve or even strengthen the paternalist state. Problems are very varied, and not possible to think in one fits all packages. The government is not aware of the actual needs. No attempt to assess them since not possible to meet them.

**Scenario 2**

Feasible, but not without government finances.

System may only be partially based on this model. Government should help out those without sufficient finances.

Pros: Special demands may be met. Stimulates innovation

Cons: Calls for own resources. It is debatable if in ten years’ time there would be sufficiently large demand and supply to make prices set through competition. Majority of those in need do not even get the information. The majority of the elderly are not competition-proof. Some market players may get monopolised. Social control is minimal. Data security is a concern.

**Scenario 3**

In time it may be feasible, but only as a complementary element. What is required: a change in mentality and training in technical skills of the elderly. Carer function or charity should be internalised in early childhood. Not much time left for that until 2025.

Many believe that to be the best alternative, and the most humane one too. Would strengthen civil societies, something urgently needed.
Pros: Everybody has a chance to offer assistance to a needy person, as his/her capabilities and time allow. **Team community building** model. May create new jobs. May be efficient in cooperation with the local government.

Cons: The carer would also need professional training. Hardly possible to **find all those in need**. Who would supervise the practice?

A summary of the views: **Unanimous support was offered to Scenario 3 only.** No one is against it; moreover the majority would support the idea that the role of community collaboration be strengthened in elderly care. Solution provided by the state (Scenario 1) is found as indispensable by about 50%, a necessary wrong answer by 40%, and a total failure by 10%. The market version (Scenario 2) was accepted by the interested parties because of the individual needs and innovation opportunities, but found affordable by a narrow group of users only. Furthermore, it is likely that no proper external, government or social control would be enforced.

From a methodological point of view it is important that the above responses were made **before the group discussions**, as based on their own experience and competence of the participants. Below, you will find that the views have not been altered as a result of the discussion. What we have here is an alignment of views rather than a shift in paradigm as a result of the debates.

**First group session: a comprehensive overview of the 3 scenarios (Phase 1)**

Shared view: All the three scenarios have values in them. In the system to be designed and implemented each model has a role, but none of them are good enough to help independent life style at a national level. Starting from the current situation in Hungary Scenario 1 is the closest to implementation in 2025, but that does not mean that the participants voted priority for that scenario. They would consider Scenario 3 as the best, but it is highly unlikely that Hungary can close up on the ten years of lagging behind in what the Hungarian society is now displaying in terms of community building, cooperation and voluntary work. Professionals believe that there are urgent tasks to be performed in the way of education.

**A general overview of Scenario 1**

The participants presumed that neither the state nor the set of ICT tools could be left out from using them for the assistance of the elderly to lead an independent life. Nevertheless, no full agreement was reached whether a lifestyle, independent and basically free from human assistance needs to be encouraged. Assumption: By 2025 the technical devices will become cheaper and more people will have the skills to use them than today.

**Pros for Scenario 1**

- Normative support system, no complex administrative system is needed to allocate resources.
- Offers national coverage.
- Tools may be acquired below market price.
Cons and dilemmas for Scenario 1

- Cannot handle individual requirements.
- Because of government finances, amount tends to vary (decrease)
- Difficult to define the level (health condition) where allocation of package (financial support) is justified.
- Not sure if levelled support is right. More deprived should have more support.

A general overview of Scenario 2

The people in favour of the possibilities to meet special needs by using own resources are not just those interested in ICT developments and market conditions. Competition between producers and service providers may have many advantages; may stimulate innovation. It also increases the feeling of responsibility of individuals, if they are active in selecting the technology intended to help him/her. It may serve as an incentive to learning and increasing knowledge. The basic issue: who is going to check the quality of services provided, who protects the user and who will block any abuse or monopoly position?

Pros for Scenario 2

- Meeting individual needs
- Government subsidy is not excluded
- Local government may fit in the system

Cons for Scenario 2

- Calls for supervision
- Few elderly can afford it
- Little experience of any eventual increase of feeling lonely
- Insurance system has to be created: must get prepared for life on one’s own
- Health data security problems even bigger than in government run system

A general overview of Scenario 3

From a user point of view this seems to be the most attractive solution, but with a whole lot of doubts with respect to its feasibility. In Hungary, save the churches, few people do practise this form of extending help to strangers. It is not part of schooling or family upbringing. Exceptions do exist, but it is not typical that well-functioning communities would come to rescue those in need. Few believe that this mentality would change significantly before 2025. It is important that the national and the local government supported the training of volunteers, provided financial, administrative and other assistance to the empowerment of the civil society. Charity and voluntary work (carers) should be socially and politically recognised.
The Pros for Scenario 3

- May reach out to people unreached by the government or the market
- This model is the least resource demanding socially
- May have a good influence on the environment
- Churches may play a role
- Relieves local governments from burden
- Healthy pensioners may be involved

Cons and dilemmas for Scenario 3

- The issue of responsibility is undefined
- Volunteers (carers) must be trained
- Family members may not be recalled from work to care the elderly for years
- Can only work well in combination with Scenario 1
- Not clear what the volunteer (carer) will get in return for his/her work (qualification?)
- Volunteers must have psychological support, staff ready to help when in doubt

**Second group session: Detailed assessment of scenarios (Phase 2)**

**Scenario 1** was assessed by the people sitting around the table allocated to professional decision-makers, researchers, experts and social scientists.

According to the *professional decision makers*: Among government responsibilities prevention should have priority number one: postpone the time of need for help and reduce the number of the needy as much as possible. The services of family doctors (GPs) should be connected to the fully state subsidized technical assistance (e.g. alarm system). That should be combined with the provision of voluntary work. Market service providers are also needed. The government system is cost-effective, yet still very demanding on resources. It is hard to imagine that by 2025 in Hungary a basic service provision may be universally extended to the elderly whom are secured a minimum level of safety when they choose to live on their own.

According to the group of *Researchers, experts and social scientists*: The main advantage in Scenario 1 is that it provides the greatest coverage. But as a stand-alone plan it will not satisfy the demand. Problem: the government has no idea of the demand to be met, and a critical number of the elderly have no idea of the contingencies. Without involving the family doctor the technical assistance cannot be seen as efficient. It is a non-dynamic system where technology is typically not upgraded. Maintenance of devices is also questionable. Seemingly it relieves the burden on the family and the local government, but that does not match reality.
Scenario 2 was assessed by researchers, engineers, expert and representatives of businesses.

According to Researchers, engineers and experts: You need a system based on multiple pillars. A market model works when competition thrives. If the number of users is small, competition fails. Today a user is at the mercy of a few privileged providers. The state cannot be relieved from its duty to create regulation and exert supervision. Geographic inequalities may also be a problem: services in urban areas are easier to provide than in rural areas.

According to the representatives of businesses: The market model is the most likely inspiration for technological development and innovation. That is its greatest advantage. But without some state subsidy only a limited number of people will find it affordable and demand may change within a relatively short period of time. The establishment of regulation, standardisation and data protection are all very important issues. It is a risk that good marketing may sell bad products to the uninformed clients.

Scenario 3 was assessed by institutions, organisations and the representatives of civil societies, all engaged in the care of the elderly and health care provision.

According to the representatives of organisations and institutions active in the provision of health care and the care of the elderly: Voluntary work must be taught, in childhood, if possible. The model may be good as an auxiliary device in the care services, and it also needs external (national and local government) support. Whether it works or not depends on the capacity of the local governments, or may be the churches, or they in combination need to provide the necessary training and the support for the volunteers psychologically or in practice. Without that condition it may happen that “the blind will guide the sightless”. The use of technology is also a question mark: many elderly people cannot even use a mobile telephone. This model is not free from the data protection problem either.

According to the representatives of the civil organisations Scenario 3 is the best solution to keep the elderly in active state, and the feeling that “I am still important for my environment.” In principle this approach is best suited to meet individual needs. A general application is hardly feasible because of the great differences between settlements in terms of community life. This seems to be the cheapest solution as it does not require any particular infrastructure. That is certainly an advantage from the elderly people’s point of view. It remains to be seen if you can count on volunteers (carers) on a continued basis, whether those who cannot rely on anybody else but volunteers may not be stranded at times.

Third group session: Analysis and synthesis of visions and recommendations (Phase 3)

Most groups created a mixed vision. They thought the year 2025 is far too close to count realistically with an elderly care system that is totally different from what we have got now, but the vision of the desired future that the participants of the workshop held is far from what we have today. Instead of a paternalist state model that decides on who is eligible, what teletechnology to use and how to go about organising the provision of services a model with multiple players with a capacity to mobilise wide masses in the society looks more desirable – it is suggested in the debate. But that does not mean that the state (the government in office) is relieved from its responsibilities. The essential elements of a new system are respect for the dignity of the elderly, and a new approach to get prepared for the old age mentally, physically and financially.
General messages worded in the visions:

- Individuals, the society at large, decision makers must be made aware that as a consequence of the rapid growth of the proportion of the elderly and less healthy people the responsibilities associated with the provision of elderly care is on the increase in Hungary too.

- Individuals, the society at large, decision makers must be made aware that there are many kinds of technologies and services available for the needy and their family members. In principle they enable the device competent elderly to live an independent life in their own homes.

- It is a job for the educators, trainers and instructors and parents to make people aware of the importance of community triggered collaboration and offering charity work (be a carer) from the very childhood.

**Key elements of the visions of elderly care for 2025**

(1) The basic care service for the elderly who need care for health reasons shall be provided by the state.

Priority jobs to make the objective a reality:

- determine the levels of baseline provisions and the criteria of eligibility that are socially acceptable;
- approve a strategy and an action plan for the provision of care for the elderly pursuant to social negotiations/bargaining;
- pass the necessary legislations;
- make resources from the national budget available;
- Tend to responsibilities in standardisation, supervision associated with the application of telecare technologies.

Baseline services shall not be one and the same assistance of technology or otherwise for all. Differences in health conditions, social conditions and activities of about 2 million people over 65 must be observed. That group is not homogeneous.

(2) The role of communities in caring for the elderly increases drastically.

According to the stakeholders this system is the best in human terms, a system that can be adjusted to individual needs. Instead of centralised government solutions this approach shall receive more attention than what it is paid today. This means community building and strengthening, involving the active elderly, creating new (relatively cheap) jobs, for instance for qualified jobless and newly retired people. Wherever it is applicable, this form of care should have priority over others. Technological background is very important in this model too. That capability would provide for two- or multiple way communication and work organisation. In smaller communities confidence stemming from familiarity of the people is an advantage.
The general use of the community model is hampered in the short run by the fact that voluntary or charity work to help the needy has not been typical in the Hungarian society for a long time (albeit it does exist). That should change as soon as possible. Priority list of to dos:

- voluntary work (charity) must be taught in the family and at schools too;
- volunteers and charity workers shall be trained within national and local government programs;
- it must be clarified what volunteers are responsible for and what rights they have;
- technical infrastructure for community care shall be provided;
- voluntary helpers must be provided psychological support;
- duties of local government shall include the training for the volunteers and the support of their work. To do so finances must be secured among other things.

(3) **Anything beyond the basic service provided shall be secured by the private sector.**

No significant increase in the demand for home care is expected, but by all means and 2025 the number of users of quality services is to increase. The public health care system of the state may also be an important customer. Priority jobs to do:

- develop products and services designed to help independent lifestyle, run local and international projects, establish cooperation between public and private sectors, service providers and users;
- assess demands;
- make sure service providers observe competition rules;
- observe rules for data protection;
- participate in informing and maybe in training of customers

(4) **Digital illiteracy in 2025 will be less pronounced than today.**

The number of Internet users is on the increase even in the elderly age group. Reluctance to use technical tools is likely to decrease. Strong competition is likely among manufacturers of info communication devices. That may have a beneficial influence on the pricing of the tools and the associated services. To-dos:

- training and education (internet- and user training)
- provision of devices and maintenance within basic services
- information update for users
- standardisation
- supervision of services (by national or local governments)
(5) All players recognise the importance of information dissemination and a social dialogue.

To-do list:

- secure information flow (between decision-making support, decision-makers and those directly affected);
- regularly furnish all stakeholders with information on the contingencies of support for the needy, including those living at the fringes of society;
- Involve the elderly and/or their agents in the preparation of decision-making process.

Each group has created at least one vision of the future as approved by the group in consensus. It follows from the heterogeneous composition of the groups (participants representing several specialisations and organisations were grouped in one group) that with respect to the above key elements no substantial difference is visible among the visions, subject to what area of specialisation the participants represent.

**Vision 1. Everybody is expected to do what he/she is capable of doing**

Neither the youth, nor the elderly are in a state of wait for the government to look after them. Individuals should in their active years look ahead of his/her post mature years period and get ready both in terms of finances and acquiring information. Families also are aware of their responsibility to help the elderly members of the family. Technological options should be individually weighted. Government support is asked for the purchase or let him/her go ahead with the purchase if he/she is aware of the pros and the cons of the deal and the use. The state is only a final agent to guarantee that all those who need support will get the support. Paternalist approach should be avoided.

**Vision 2. Government to provide the basis**

The government plays an active role. In addition to passing the appropriate legislation the state provides a number of other kinds of assistance for the elderly to live independent lives. Will pick the technology with a minimum level of security and hands them out to the needy. Keeps in mind that the elderly are not a homogenous group. Does not enter the equalitarian game, but meets different needs by different means. After the appropriate training it will recruit new labour from educated jobless people and offer them jobs in care.

**Recommendations for Visions 1 and 2**

It is a national or local government’s duty to operate appropriate information channels for the elderly: to tell them what support is available; what to purchase if they chose to live an independent life. The government shall follow the national strategy for handling the care of the elderly as approved in 2009 by the parliament, or prepare a new strategy as soon as possible. The public system of education and social insurance shall deliver help from a society interested in self-sufficient, independent lifestyle. Voluntary work and charity should also be included in second and third level education curricula (credits for volunteering). The government shall promote intergenerational cooperation with a number of programs. The clarification of roles and a reasonable sharing of duties among the players in elderly care provisions are an important task.
Vision 3. Division of tasks among the government, the private sector and the communities

The main players agree on a protocol of cooperation, sorting out responsibilities. The task of the state: regulation and the provision of resources. More resources should be allocated to the health care sector, social care and for organising communities. Developers of technologies shall participate in the instruction. Service providers shall make sure that compatibility is in place. New kind of system of incentives shall be introduced where maintenance is part of the service provision. Communities also act as information sources for the elderly. Volunteers and charity workers offer physical and mental assistance to those in need.

Vision 4. Basically private sources

The Government shall provide a minimum set of care services for all. In addition to that everybody shall be responsible for creating the conditions he/she needs to live in independence. The role of the community is minimal in this version.

Recommendations for Visions 3 and 4

The players get prepared for delivering the tasks in the course of long term planning. A new strategy for the elderly shall be prepared or the existing one will be performed. A plan of action is prepared, not just a description of the strategy. That should include the market players and those affected by care (the needy) too. The customers shall state their expectations in terms of the quality of the service provided by the care system.

From an individual’s point of view the main thing is a life worth living. A part of this idea is the capability to live as long as possible in an independent self-sufficient fashion. The social environment becomes supportive, if the tension between various groups in society decreases, and tolerance and solidarity increase. Topics in school curricula and education should be extending to include more social issues than what there is now.

Vision 5. Mixed model: government and local communities

The provision of the basic service is the responsibility of the state, yet if you do not make use of it, you still do not rob others from the opportunity. No packages of devices are automatically posted to anyone turning 65, or because he/she has a health problem. Health conditions of the eligible shall be properly assessed. Technology is needed to provide a feeling of security. It contributes greatly to personal independence; therefore digital illiteracy shall be eliminated. A considerable portion of the provision of care that includes socialisation will be realised through community efforts to join forces. Churches are to play significant roles. The provision of care shall be organised at a regional level, including trainings. Goal: let the elderly live as long as possible in an independent fashion. The alarm EABS system shall have a national coverage.

Recommendations for Vision 5

Civil organisations shall receive increased support so that they can help those in need. There is a need to pass an act on the issues of the elderly. Data protection shall be promoted by legislation. It is reasonable to establish a government agency for ICT issues, to select the
suitable technologies, to store data files and to do maintenance, etc. More and better instruction is needed for people working in social care. Let that be a career option: a model career shall be defined to allow planning a career. Community services shall be made nationwide in proportions. Members: secondary school students, students in HE. Communication is very important: national campaign shall be run to disclose new options, legislation, etc. Locally the public health care centres and surgeries shall display the majority of information (leaflets). Communities must be trained to become able to provide appropriate information. Let there be social negotiations and bargaining and forums. „Let somebody be responsible for the lot of the elderly even if they themselves are not concerned about themselves.”

Vision 6. Private sector and communities with state control

A working system may be envisaged as an amalgamation of the three scenarios. The government tends to act as an agency of control and regulation. The majority of the services are purchased by the customers, but if they are unable to buy the services, he/she can rely on the assistance of civil organisations. Prevention will be more significant than it is today. For instance: people will be prepared on how to accommodate to the changes that are entailed by retirement. Communities will have resources to apply for. Good (best) international practices will be utilised in Hungary too.

Recommendations for Vision 6

The system for the strict supervision of the private sector (service providers) must be implemented. The issue of data security shall be sorted out. The rights and responsibilities of volunteers while tending their duties must be specified.

Vision 7. Team work

This vision expects the participation and activities of a number of local, central, market, community and individual players in order to facilitate the independent lifestyle of the elderly. It incorporates insurance policy alternatives (preparation for becoming elderly), will dedicate a big role to the media and competent experts, practitioners in elderly care. Recommends the organisation of complex professional teams at local level (physicians, nurses, gerontologist, educator, psychologist, communication experts, and ICT technician to design and set up a local data base, etc.). The main actors in organising are the local governments; in financing it is the national government.

Recommendations for Vision 7

Let the state and the local governments make a common decision on the allocation and delegation of responsibilities. Let regulation be flexible: the issue of elderly care shall not be dealt with necessarily the same way in every village. Means testing criteria shall be worked out. Prior bargaining the terms with social partners is recommended.
Alignment with national policies

In a situation when the validity of the existing national strategy for the care of the elderly is queried, the visions and recommendations created by the participants cannot be vetted against an official concept. Nevertheless the following considerations may be used for a concept to be prepared in the future:

- **The provision of a baseline service for the elderly is the responsibility of the government in office at all times.** Social bargaining to arrive at consensus should be used to define the scope of the baseline service. The participants of the workshop believe it is not clear who is eligible without means testing, but means testing itself is ambiguous and the degrees of it are unclear. Methodologically founded surveys on demand and an actual description of the conditions of the needy are hard to go by. Individual health assessment takes time and manpower, but without them it is difficult to offer appropriate help. The participants emphasised that there is a great difference in the health conditions of the elderly people who need care. Those differences should not be overlooked with respect to the use of technological devices.

- **The provision of the legal, educational, standardisation and supervision environment for a viable elderly care system operating besides the basic provision is a priority responsibility for the government.** These are indispensable if multiple players are to participate in care provision and/or the provision of devices and other infrastructure of the individual services, but only under regulated and supervised conditions.

- **Local governments are more knowledgeable of the problems of people living within their confines than the central government.** In a system with multiple players the local governments could volunteer for a number of activities in addition to performing what is obligatory for them. Strong confidence in local government in the visions is reflected in the fact that the participants would vote for the strengthening of the activity of the local government either in care provision or in training, helping and supervising other players.

- **The responsibility of the individual shall be part of the new concept for elderly issues.** Little is said about that in Hungary, whereas ageing is a prolonged process with plenty of time for preparation. It is in the interest of the individual and the society that the time when an individual loses his capacity to live an independent life shall be postponed as late as possible. Family doctors can do the most in order to make the individual aware of the risk factors (obesity, alcoholism, etc.). The role of the media is also considerable in raising awareness of the devices and means that are available for getting ready (mental and physical activity, preservation or extension of social ties as far as practicable, acquisition of technical knowledge needed for communication etc.) for ageing. Prevention may hamper the unduly incidence of diseases associated with old age (e.g. screening, education for a healthy life). Inactivity sets in very early in an individual’s life in Hungary. Whoever can, will seek early retirement, because for many that period means an unchallenged financial security. The participants believed that because of the unwanted health consequences of inactivity, activity in the elderly
years must be boosted through programs, projects and by making use of the knowledge and energy of the elderly through offering peer care.

- The policy for the elderly may be founded by involving voluntary helpers (carers) in the home care system, especially in smaller residential areas, not so much in urban areas. That option received the greatest support in the visions presented. New systems should be built by providing education, financial schemes and background services where volunteers would really lessen the burden on local governments. The importance of personal needs and contact with live people was also emphasised in the related visions. The requirement for data protection and the issue of the responsibility of the volunteers must be dreamt up too.

- The use of telecommunication devices in elderly care at present is limited to a small number of people in Hungary. Apart from the EABS alarm button there is no device in use with users around ten thousand. With the extension of internet usage considerable change is expected in the attitude of the elderly even within ten years from now. The receiving end (physician, nurse, family member, hospital and other ICT systems) should consider an increase of demand from the people who chose to live an independent life in their own homes.

**Feedback and reflections on the methods used at the scenario workshop**

**Reflections by participants**

We have not disclosed the method in the letters of invitation. The name of the event (scenario workshop) did not mean a thing for 90 percent of those invited. When we talked to them on the phone we indicated that it was not going to be a conference, and due to the method used there would be little room for speaking up in front of a plenary audience.

In the breaks, time came to ask questions with respect to the method as well. Most of the people interviewed found the method applied interesting, and many were surprised at the pace pursued. Just a few social scientists had negative views, especially at the beginning of the workshop (in face to face discussions). By the end of the workshop people became less critical and they changed for slightly positive views saying that: „It may well be that there is no other way to find out the views of so many people in such a short period of time.”

The moderators and the rapporteurs were disclosed the method in a session on the week before the workshop. They thought it was interesting, but some were worried about the unusual rigid structure and the pace demanded. Much to our luck the moderators were professional people. They were able to accommodate to the situation, and had a good control of the debates. The detailed program and the script for the workshop proved to have worked well. Some of the rapporteurs did a very good job; others found it a problem to follow what was said by about 7 to 9 very active speakers. At the beginning the variety of post-it sheets presented a difficulty, but the staff of the secretariat came to our rescue: all packages were put in an envelope properly labelled, with instructions as to which phase of the workshop the packages should be used. At the end of the workshop the post-it sheets were inserted in the appropriate envelopes, which was very handy at the time of processing the materials later.
The organisers received feedback of unanimous appreciation at the end of the workshop. The most appreciated factor was the fact that the issue was put on the agenda at all. Very positive views were heard saying that thanks to the PACITA project it became possible for the representatives of diverse occupations to have an open exchange of views. “We need a lot more programs like this one,” they emphasised. They used words of appreciation to describe the coordinating role of MTA, and the commitment of MTA, as expressed by the Vice-President, to the research of the problems of the ageing society and promoting the dialogue within the society.

All participants asked MTA Secretariat to send them the summary report to be prepared on the workshop. They would also be pleased to read the summaries of the workshops of other countries. They would like to make use of the outcome in their own work.

**Media interest**

On the first workday before the workshop a detailed report was exhibited at the webpage of MTA on the event and then the project itself. As a result two radio interviews (InfoRádió and Civil Rádió) were broadcast, and a national TV channel (ATV) inquired, in addition to further interest indicated by the staff of MTA Communication Department.

**Dissemination among political players**

Capitalising on the huge interest in the subject of “Ageing society” we are planning to approach domain policy makers and politicians. The most important goal is to strengthen the knowledge based decision making process by using technology assessment if possible, in institutionalised form. Recommendation to start from: In one of the research institutes of MTA a smaller unit should be created with a dedication to TA.
Appendix A: List of participants

Roundtable 1.: Political Decision Makers– local and national

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
<th>Position</th>
<th>Field of Interest</th>
<th>Additional Info</th>
</tr>
</thead>
<tbody>
<tr>
<td>Péter Dombai</td>
<td>National Institute of Quality and Organizational Development in Healthcare and Medicines (GYEMSZI), E-health Program Office</td>
<td>E-health expert</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dr. Gabriella Ecsedi</td>
<td>National Public Health and Medical Officer Service - Office of the Chief Medical Officer</td>
<td>Public Health Officer, Lawyer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ilona Győrffyné Molnár</td>
<td>Local Government of District 11 (Budapest) Human Service Directorate</td>
<td>Director</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mária Hablicsekné Richter</td>
<td>Central Administration of National Pension Insurance</td>
<td>Insurance Mathematician</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Csilla Jeneiné dr. Rubovszky</td>
<td>Local Government of District 5 (Budapest)</td>
<td>Vice-Mayor</td>
<td></td>
<td>“helping hands” program</td>
</tr>
<tr>
<td>Erika Ildikó Lukács</td>
<td>Ministry of Human Resources, Department of Old Age Affairs and Pension Insurance</td>
<td>Senior Advisor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dr. Julianna Nagy</td>
<td>National Health Insurance Fund</td>
<td>Head of Unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Krisztina Nagy</td>
<td>Local Government of District 5 (Budapest) Unit of Social Welfare</td>
<td>Head of Unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dr. Rita Paphalmi</td>
<td>Office of Health Authorization and Administrative Procedures</td>
<td>President</td>
<td></td>
<td>medical devices</td>
</tr>
</tbody>
</table>

38/44
### Roundtable 2.: Technology Experts

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
<th>Position</th>
<th>Field of Interest</th>
<th>Additional Info</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dr. Péter Hanák</strong></td>
<td>Healthcare Technologies Knowledge Centre, Budapest University of Technology and Economics</td>
<td>Chairman</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>eVITA (Assisted Information and Communication Technologies and Applications) National Technology Platform - National Innovation Office</td>
<td>President of the Operative Body, President of the National Platform</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Dr. István Kósa</strong></td>
<td>University of Pannonia, Centre for Medical Informatics Research &amp; Development (CMIRD)</td>
<td>University Associate Professor</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Dr. Bertalan Meskó</strong></td>
<td>Semmelweis University</td>
<td>Medical Technology Blogger</td>
<td>Webicina.com, the first service that curates the medical and health-related social media resources free of charge for patients and medical professionals, filling the gap between healthcare and digital technologies</td>
<td></td>
</tr>
<tr>
<td><strong>Ildikó Papp</strong></td>
<td>Bay Zoltán Nonprofit Ltd. for Applied Research, Institute for Infocommunication Technologies Department of Medical Informatics</td>
<td>Head of Unit</td>
<td>Planning, developing and operating new healthcare IT systems</td>
<td></td>
</tr>
<tr>
<td><strong>Zoltán Sándor</strong></td>
<td>Semmelweis University, Health Informatics Development and Further Training</td>
<td>Engineer</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Dezső Vass</strong></td>
<td>Bay Zoltán Nonprofit Ltd. for Applied Research, Institute for Infocommunication Technologies Department of Medical Informatics</td>
<td>Senior Researcher</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Éva Virág</strong></td>
<td>Hungarian Academy of Sciences, Institute of Computer Science and Control, Department of Distributed Systems</td>
<td>Project Manager</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Roundtable 3.: Researchers, Sociologists

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
<th>Position</th>
<th>Field of Interest</th>
<th>Additional Info</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Daiki Tenno</td>
<td>Eötvös Loránd University, Faculty of Informatics, Department of Media and Educational Informatics</td>
<td>Teacher of Technology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dr. Etelka Daróczi</td>
<td>Hungarian Central Statistical Office, Hungarian Demographic Research Institute</td>
<td>Senior Research Fellow</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prof. Márk Molnár</td>
<td>Institute of Cognitive Neuroscience and Psychology, Psychophysiology</td>
<td>University Professor, Group Leader</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dr. Judit Monostori</td>
<td>Hungarian Central Statistical Office, Hungarian Demographic Research Institute</td>
<td>Senior Research Fellow</td>
<td>aging society in the post-Lisbon strategy</td>
<td></td>
</tr>
<tr>
<td>Dr. Erika Sárközy</td>
<td>Erasmus Institute of Public Life and Communication</td>
<td>Director</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prof. Agnes Utasi</td>
<td>University of Szeged, Faculty of Arts, Institute of Society Theories</td>
<td>University Professor</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Roundtable 4.: Companies/Enterprises

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
<th>Position</th>
<th>Field of Interest</th>
<th>Additional Info</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dr. Csaba Dózsa</strong></td>
<td>Med-Econ Human Services Ltd.</td>
<td>Managing Director</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Csaba Engi</strong></td>
<td>Hungarian Association of Information Technology Companies (IVSZ) / ICT Association of Hungary</td>
<td>E-health Working Group Leader</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Zoltán Havasi</strong></td>
<td>MOHAnet Integrated Mobile Solutions</td>
<td>Chief Executive Officer</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Lajos Lukács</strong></td>
<td>DSS Consulting Ltd.</td>
<td>Executive Director</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Pál Miletics</strong></td>
<td>Hungarian Telemedical and E-Health Association Answare Kft.</td>
<td>President Managing Director</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ákos Szigetvári</strong></td>
<td>MOHAnet Integrated Mobile Solutions</td>
<td>Director</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Tamás Wolf</strong></td>
<td>Wolf Medical Kft.</td>
<td>Executive Director</td>
<td></td>
<td>home ECG device with internet data transmission</td>
</tr>
</tbody>
</table>
### Roundtable 5.: Institutions and organisations as players in elderly care and health care

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
<th>Position</th>
<th>Field of Interest</th>
<th>Additional Info</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piroska Balázs</td>
<td>Helping Hand Care Service of Kispest</td>
<td>Institution Leader</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dr. Éva Borsányi</td>
<td>General Practitioner’s Surgery at Hold Street, Budapest</td>
<td>General Practitioner</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Petra Farkas</td>
<td>Helping Hands for the Active Ages Public Nonprofit Ltd.</td>
<td>Social policy Administrator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dr. Sándor Gárdos</td>
<td>General Practitioner’s Surgery at Sopron Street, Keszthely</td>
<td>General Practitioner</td>
<td>Member of the Hungarian Association for Home Care and Hospice</td>
<td></td>
</tr>
<tr>
<td>Ágnes Hajós</td>
<td>Franciscan Betánia Retirement Home</td>
<td>Institution Leader</td>
<td>Franciscan sister</td>
<td></td>
</tr>
<tr>
<td>Józsefné Kovács</td>
<td>Hungarian Red Cross, Budapest Branch</td>
<td>Institution Leader</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zoltánné Salgó</td>
<td>Hungarian Red Cross, Budapest Branch</td>
<td>President</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dr. Péter Szabó</td>
<td>General Directorate of Social Affairs and Child Protection, Department of Directly Maintained Institutions</td>
<td>Head of Department</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zita Zékány</td>
<td>Hungarian Association of Geriatrics and Gerontology</td>
<td>General Secretary</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Roundtable 6.: NGOs (Representing the elderly and their relatives)

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
<th>Position</th>
<th>Field of Interest</th>
<th>Additional Info</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Bálint Boga</td>
<td>National Association of Pensioners “Life to the Ages”</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zsuzsa Ertingerné Hrumó</td>
<td>Relative</td>
<td>Relative</td>
<td></td>
<td>home care</td>
</tr>
<tr>
<td>Katalin Gerőcs</td>
<td>National Centre for Patients' Rights and Documentation</td>
<td>Patients’ Rights Advocate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Éva Hegyesiné Orsós</td>
<td>“Life to Years” National Association of Pensioners’ Clubs and the Elderly</td>
<td>President</td>
<td></td>
<td>member of FIAPA Pensioner Clubs and Elderly International Federation of Senior Citizens Associations, delegate to the National Council on Sustainable Development</td>
</tr>
<tr>
<td>Ildikó Höhn</td>
<td>National Centre for Patients' Rights and Documentation</td>
<td>Patients’ Rights Advocate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tünde Koltai</td>
<td>National Association of the Organisations of Coeliac Disease Patients</td>
<td>President</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Györgyi Némethné Jankovics</td>
<td>National Federation of the Associations of Hungarian Pensioners</td>
<td>President</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mária Véghné Reményi</td>
<td>Budapest Association of Pensioners</td>
<td>President</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix „B”

List of References

1. 1138/2002. (VIII.9.) Korm. határozat
5. KSH, Népességtudományi Kutatóintézet: Magyarország népességének várható alakulása 2060-ig. KorFa, 2013/4. szám
8. PACITA-project homepage: http://www.pacitaproject.eu/