Turning Demographic Ageing in Europe into Opportunities

By Silas Olsson, HealthAccess, Sweden



By exploring innovative initiatives in Europe and synergy possibilities with European Union Innovation Programmes and Regional Development Funds to support Seniors by innovative solutions enabled by Information and Communication Technology.



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Context of the Report:

New Opportunities to Shape Consequences of Demographic Ageing in Europe, Creating Jobs in Industry, Innovating and Integrating Health, Healthcare & Social Care to Support Seniors

by

ICT for Health - eHealth - Enabling Innovative Solutions

[.....Telehealth, Telecare, Telemedicine, Health IT, Wellness technology, Health Apps, Welfare Technology, mHealth, Medical Informatics, Digital Health, Connected Health.....]

Inspiring and enabling by

- Innovative Regions in Europe
- New EU Initiatives and R&I Programmes 2014-2020
- New EU Regional Development Funds 2014-2020
- Synergies, EU & National Initiatives and Programmes

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Preface

In Europe (EU-28), currently 17% of the population, or 85 million people, are 65 years or older. Projections show that in 2030, 23% or 125 million people, and in 2060, 30% or 155 million people, will be 65 years or older. The ongoing demographic ageing is a real challenge to individuals and families, healthcare and social care systems and their financing due to burden with age related care, health diseases and chronic health conditions. Fortunately, demographic ageing also opens up for new initiatives and opportunities for active and healthy ageing, including innovation, social innovation, co-production of health, industry, markets, exports, business, growth and new jobs. In this context, Information and Communication Technologies (ICT) will play a decisive role.

In the European Union (EU) there are key policies established that support initiatives to meet challenges and to seize opportunities with an ageing population. The key EU policy document is the "Europe 2020" which focuses on strategies for smart, sustainable and inclusive growth. Other EU policy documents in this context include "Innovation Union" and "A Digital Agenda for Europe".

The EU new financial period 2014-2020 offers several new initiatives and programmes to shape consequences and seize opportunities of demographic ageing. Examples include the new R&I programme Horizon 2020, the Health for Growth Programme, the Employment and Social Innovation Programme, the progress of the large ongoing initiative of the European Innovation Partnership on Active and Healthy Ageing, and the new European Regional, Structural and Cohesion Funds.

Public care of seniors, as well as of disabled persons, in most countries, lays on municipalities, cities, counties and regions, although national governments can play their role in establishing e.g. national policies, guidelines, initiatives, strategies, programmes, and law-making. In the EU new financial period 2014-2020, municipalities, cities, counties and regions together with stakeholders such as universities, institutes, industry, healthcare and care providers, public and private organizations and users have a very supportive set of initiatives, programmes and funds to meet challenges and seize opportunities of demographic ageing. In this context, Information and Communication Technologies, eHealth and welfare technologies are seen as crucial to enabling innovative solutions.

The aim of this report, thematically shaped, is to show examples from European municipalities, regions and countries on initiatives and innovation to meet challenges and to seize opportunities of demographic ageing, and to show new opportunities offered by new EU initiatives, programmes and funds during 2014-2020 - to stimulate discussions and initiatives amongst municipalities, cities, regions, countries, industry and stakeholders to strategically and jointly use the different EU programmes and funds for synergies, more impact and less fragmentation.

Comments to this report are welcome by the author. Of specific interest is feedback from regions and stakeholders, in Europe and beyond, that are about to establish, or have already established, policy supported innovative programmes to support seniors, where ICT, eHealth and welfare technologies are enabling factors.

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Overview and Summary

Background and aim of the report

That more and more people are living longer is of great value to individuals, families, society and businesses. However, demographic ageing is also a major global challenge and an urging issue specifically, at present and for the nearer decades to come, for the Industrialised countries. This means, amongst others, that a larger proportion of the population will be older, "Seniors", and at the same time, due to lower fertility rate, fewer youngsters will enter into the labour force market. To find innovative solutions and social innovations, to support seniors, new ways to deliver and access supporting services, including health, healthcare and social care, are key to sustaining socially and economically and to further develop the domain of "Active and Healthy Ageing, Independent Living, Empowerment, Co-production of Health and Mobile care, Homecare, Social care and Home Services".

In Europe today, 85 million persons age 65 or older and in 20 years, this group of the population will grow to approximately 125 million. Fortunate, demographic ageing opens up for new opportunities to shaping the consequences of an ageing society – including innovation, new products & services, new markets, businesses, economic growth and new jobs in industries – and innovative solutions to develop and change the way health, healthcare and care are organized, delivered and accessed by seniors, families and informal carers and to support health, healthcare and social staff professionals.

The aim of this report is to provide a thematic overview of on-going works and initiatives with examples from some European municipalities, cities, regions and countries, matched with information about EU initiatives, new programmes and new funds for the new financial period 2014-2020, to inspire discussions, reflections and debates among the stakeholders, private and public, about policies, priorities, co-operation, co-ordination, possible synergies, initiatives and leaderships to meet the challenges and seize the opportunities of demographic ageing.

Of course, there are options of policies and priorities to meet the challenges of demographic ageing and here, in this report, focus are on innovative solutions enabled by Information and Communication Technologies (ICT), / eHealth. To try serving this purpose, this report gives an overview, not detailing, of related programmes and initiatives in Europe. Some references are made to initiatives beyond Europe (Japan).

This report has basically two parts. The first part of the report shows examples of municipal, regional and national initiatives in Europe in response to demographic ageing supported by strong political backing. The second part provides an overview of on-going programmes and new initiatives at EU level. All initiatives use ICT (and associated enabling technologies) to enable innovations, developments and changes in structures, organisations, processes and service delivery related to older persons.

Information about demographic change and demographic ageing as such is not the focus of this report as there is already available a foundation of literature covering these matters. However, in the end of this report a selection of literature and references are shown for the convenience of the reader.

Initiatives in some municipalities, cities, regions and countries in the EU, and in Norway and Japan, to respond to demographic ageing by innovation

Part one of this report shows examples of innovative initiatives in some municipalities, cities, regions and on national basis in Europe, all initiatives with a strong political backing to address the challenge of demographic ageing, and associated challenges, with bold approaches. The rationale behind the initiatives is often that the present structures in health, healthcare and social care systems, and its financing, are regarded not sustainable.

At the same time as addressing the sustainability issues in the mentioned systems, the initiatives are also aiming at seizing the opportunity to establish a public-private collaborative environment to support industry to find innovative solutions, to create markets, economic growth and new jobs. The aim is to innovate to create a win-win-win situation, to support older people for active and healthy ageing and a better quality of life, to develop and reform for sustainability in health, healthcare and social systems, and to create economic growth and new jobs.

The 12 examples of initiatives in EU countries, and in Norway and Japan (see part 1 of the report), may hopefully serve as a catalyst for countries, regions and municipalities to reflect on taking further initiatives to strategic collaboration and to find synergies between EU programmes for more impacts and less fragmentation in the domain of innovation, demographic ageing and active and healthy ageing.

The examples of initiatives in Europe to shaping the consequences and to seize the opportunities of Demographic Ageing are shown in 12 "meeting reports" in Part 1 of the report. Key findings include:

Economic/financial and sustainability related findings in meeting reports

- ✓ Seniors of age 80+ will increase by 50% in the coming 15 years, number of persons entering into the labour market will be reduced and on top of this staff retirements. This makes it a real challenge to maintain good quality services to seniors.
- ✓ In 10 years, due to demographic ageing, the cost of social support to seniors will rise considerably, and the public budget will not sustain to keep or increase the level of quality and quantity of social care for seniors.
- ✓ Public regional policy for innovations in healthcare and social care to enhance quality of life of seniors and disabled persons, and to respond to demographic ageing as the current model and the system are not financially sustainable.
- ✓ Increasing cost, due to demographic ageing, for social services is not sustainable.
- ✓ The need for bold transformational change has never been greater than in the current financial and demographic climate.
- ✓ Public procurement is used and quality in services, not only the price, is an important part of the rating points of the procurement process.

Policy related findings in meeting reports

- A national initiative is established to coordinate strategic information and knowledge to support industry in the ageing domain.
- ✓ A national initiative is established, under the ministry of finance, with a focus on innovations in healthcare, social care, education and training.
- ✓ A national cluster is established which acts to support innovations in e.g. prevention and healthy ageing.
- National initiative to support and network industry and specifically SMEs for collaborative work with stakeholders as e.g. academia for innovations and solutions that address demographic ageing and underpin sustainability in health and social systems.
- ✓ National welfare technology program, run by the ministry of finance, to meet challenges of demographic ageing and at the same time loss of staff in the public sector due to retirements.
- ✓ National thematic programme on healthcare, social care and education and training is aiming to ensure cooperation between ministers, regions and municipalities.
- ✓ A regional policy is established to reorganise the structure of provision of chronic care with support of ICT enabling innovative solutions.
- ✓ Users, staff and politicians should be involved from start when developing innovative ICT enabled solutions to care of seniors – as politicians will take the final and a core decision about public finance of the implementation of the innovative solutions.
- ✓ An ongoing policy debate to shift the balance of the cost burden between the municipality and central government for e.g. home care and home social services.
- √ Regional Policy Declaration in place to improve sustainability of the health and

- healthcare systems and to generate a competitive industry based on innovation and internationalisation.
- ✓ A regional organisation established, led by the regional minister of welfare, with civil society organisations involved, to supports industry-involved innovation and entrepreneurship in healthcare and social care.
- ✓ Regional policy to strengthen cross-sector policies to support technology enabled social innovation to support older people to stay at home as long as they wish.
- ✓ Regional top policy is on ageing population preventive measures by ICT enabled solutions e.g. to avoid hospital and care admissions as long as possible.
- ✓ Regional law in place on innovation in the welfare sector.
- ✓ Strategic collaboration established amongst 10 local governments on demographic ageing issues; priorities include developing and implementing ICT enabled solutions in the field of e.g. wellbeing, healthy ageing and independence.
- ✓ The region is welcoming researchers, innovators, entrepreneurs and companies from Europe and beyond with a priority to support innovative solutions in the context of demographic ageing.
- ✓ Strategic collaboration with large industries to get theirs strategic competence matched with the competence of the policy and plans of the region and to be linked-up with local SMEs.

Services, technology and innovation related findings in meeting reports

- ✓ A way to meet demographic ageing, on the conditions of the seniors, is to introduce modern ICT enabled solutions to support staff in home care and social care and to support seniors to better empower their own situation, dignity and independence.
- Mainstream mobile technology is used together with R&I developed technology & systems.
- ✓ A key priority is to develop efficient integrated solutions with all actors involved (e.g. social care/welfare, home care and healthcare) in care of seniors and were seniors (and family, informal carers) are involved in a leading decision-making position.
- ✓ Call-centres with nationwide coverage for checking ECGs after a heart event and prescribed by specialist physician or local GPs.

Industry and market related findings in meeting reports

- ✓ Industry, with their valuable knowledge and experience, should be more involved in close collaboration with the customer, to jointly take initiatives e.g. to solutions to change working procedures and organisation.
- ✓ Strategic liaisons with industry established for visionary work and co-work with local SMEs.
- ✓ Attitude against ICT and/or technology based innovative solutions to support seniors is broadly found, but not at all by seniors themselves, or by staff or by persons living close to the seniors. Initiatives should be taken to overcome those attitudes.
- ✓ For the industry to structurally benefit from jointly private-public work and innovative projects to support seniors, a Technology Healthcare Centre is established, as a one-stop-shop, to support industry to testing products and services.
- Leading innovations and regional developments in an international perspective.
- ✓ Technical standards are needed to be developed to ensure proper connect and interoperability as a range of sensors, devices and applications expand.
- ✓ Lack of standards and interoperability for ICT based solutions in healthcare and social care hampers market developments in Europe and beyond.
- ✓ The supported regional development, some 125 projects, all with industry involved, is evaluated with an international market perspective.

European perspective related findings in meeting reports

- ✓ As Europe is Multilanguage the industry should develop solutions accordingly, upfront, to meet the need and to expand the markets.
- ✓ The procurement process of ICT based services for home care included e.g. ratings

- for functional requirements and quality, besides price, with good results.
- ✓ Our participation in European projects has been very useful.
- ✓ Strong regional political backing to support European level collaboration for social innovations.
- ✓ Participation in European projects is very useful, but for a small municipality, it is difficult due to lack of needed administrative resources.
- ✓ In a globalized world our region is looking also for collaboration beyond Europe.
- ✓ It is of utmost value to learn from other municipalities and regions in Europe about new ways elderly care and home services are delivered. There should be a European platform for such exchange of knowledge and experiences.
- ✓ An active dialogue and exchange of knowledge and experiences (including policies) between municipalities and regions are highly sought for.
- ✓ There should be a mechanism in Europe for sharing information and experience about social initiatives and social innovation, experience and results.
- ✓ To respond to the demographic ageing, the initiative of the European Commission
 with the "European Innovation Partnership on Active and Healthy Ageing" is strategic
 to bring Europe together and to develop innovative solutions.
- √ Vision 2020 is to integrate health and social care for seniors to live longer at home or
 in home setting and to be a world leader in the delivery of high quality of healthcare
 services.
- ✓ At European level, there should be initiatives to establish large demonstration and visibility projects, and to harmonize the European markets and to get rid of structural barriers to European markets.
- ✓ The market for ICT-enabled solutions are limited in a small country and the European market is large, and potentially huge, but fragmented.

The close collaboration between the public sector and industry is seen as a key in the above initiatives from the "meeting reports" to address the challenges and seize the possibilities of demographic ageing. It is also seen as a key to develop markets for such solutions. The potential European and international markets are regarded as potentially huge. For example, the government in Japan is expecting a market in Japan by 2020 equal to € 180 bn. Although healthy niche markets already exist, it is generally regarded that the "home market" in a region or in a small country, is too small for an efficient production benefiting from economy of scale. A collaboration to establish a working European market is asked for and in addition it underpins the basis to strengthen industry, support growth, and create new jobs.

To address the challenges and opportunities of demographic ageing, to develop visions, policies, strategies, and implementation road-maps require experience, efforts and leadership, as well as competences for testing and assessing proposed solutions. Sharing experiences and best practices, and collaboration, amongst stakeholders, also cross-border, are seen as crucial to speed up initiatives, innovation and implementation of solutions to shaping the consequences of demographic ageing and supporting population for an active and healthy ageing.

Also, the "meeting reports" shows there are no longer any doubts about that ICT and associated technologies are strategic enabling components in policies to develop innovative solutions to respond to demographic ageing, to enable developments and changes in processes, organisations, systems and service delivery related to older persons, and to promote and achieve active and healthy ageing of the population.

In part one of this report, in addition to the "meeting reports" from EU municipalities, regions and countries, there is also a brief of the developments in Norway and Japan in the context of response to demographic ageing.

In Norway, the Norwegian Parliament decided on June 11, 2013, with large cross-party majority, to adopt the "Future Care" for innovation and development of care services in Norwegian municipalities, mainly based on the report "Innovation in Care" (NOU 2011:11). In a short summary, the "Future Care" included major movements, such as:

- From healthcare to prevention and rehabilitation
- From traditional care institutions to other living and housing conditions
- New and better ways of cooperation with the civil society and better conditions for informal (family) careers
- Mobilize and use the resources of the society for social care in new ways
- Develop new forms of care enabled by new technology, new methods and new forms of work, as well as amendments to the legal framework
- Strengthen the municipalities' research, innovation and development work

The budget for the agreed work to be done ("Future Care"), will be decided on an annual basis and for 2013, 100 million NOK (approx. € 12 million) was approved. Also 100 million NOK is decided for 2014. In addition, for 2014, 50 million NOK is proposed for further competency enhancement in the social care sector as well as a major increase in investments for nursing homes and social care service homes.

Japan, with a population of 127 million inhabitants, has one of the most rapidly ageing populations in the world. Currently Japan has 127 million inhabitants, of which 26% are 65+ years old. Projections for 2025 show that by then 30% of the population is 65+ years old. To meet the demographic ageing challenges, Japan Government has taken a number of initiatives. One of the initiatives is based on Information and Communication Technologies with the over-all mission of realizing the Ageing Society, where whole generations of people can be active thanks to ICT enabled innovations. The vision of the Japan Government in this context is to be able to:

- · Live independently and enjoy a long and healthy life
 - o Establishment of an ICT enabled prevention model
 - Expansion of Electronic Health Records
- Work with motivation in life and participate fully in society
 - o Improvements in ICT literacy
 - Development of ICT enabled robots
- Create new industries and expand into the global market
 - o Creation of a Smart Platinum Mobile Health Industry
 - o Global expansion and international cooperation
 - Creating an equal to € 180 billion worth market in Japan by 2020

The issue on Demographic Ageing – the ageing society – is on the top priority of many national agendas, including Japan and EU. ICT enabled innovation addressing these challenges can create major opportunities for citizens and industry. To strengthen research and innovation cooperation between EU and Japan in the field of Demographic Ageing the "Japan-EU policy Forum on Silver ICT" was held in Brussels in November 2013. The Forum pursued, amongst other, cooperation in the fields of:

- Service robotics for independent living
- Open software platforms for service integration
- Large scale ICT pilots on innovative services for ageing well
- Large scale data sharing and analysis
- R&I roadmaps and strategic agendas

One platform for EU-Japan collaboration is the EU-Japan Centre for Industrial Cooperation, a non-profit organisation set up in 1987, by the European Commission and the Japanese Government. The aim is to promote all kinds of industrial, trade and investment cooperation between the EU and Japan. The EU-Japan Centre is also promoting R&I cooperation between EU and Japan and gives its support e.g. to SME cooperation, partner search etc. Offices are located in Tokyo and Brussels.

European level initiatives – Research and Innovation Programmes and Funds 2014-2020

Policy and steering documents of the EU - the European Union

In the domain of policy for economic growth, innovation and research and the digital society, there are three main policy and steering documents on European Union (EU) level, which govern initiatives and processes on EU level and are directly relevant to the subject of this report. The three documents are;

A. "Europe 2020" - A European strategy for smart, sustainable and inclusive growth

Europe 2020 is the main EU policy and steering strategy document and intended for the time frame 2010-2020. It focuses on growth, more jobs and better lives and should be seen in the light of the global impact of the economic and financial crisis. It is signed by José Manuel Barroso, chairperson of the European Commission in March 2010 and agreed by the EU Member States at June 2010 European Council. The three priorities of the strategy are the following;

- Smart growth is about developing an economy based on knowledge and innovation
- Sustainable growth is about promoting a more resource efficient, greener and more competitive economy
- Inclusive growth is about fostering a high-employment economy delivering social and territorial cohesion

Cohesion policy and its Structural Funds are key delivery mechanisms to achieve the priorities of Smart, Sustainable and Inclusive growth in Member States and Regions.

Seven "Flagship initiatives" are the main instruments to catalyze progress of the Europe 2020 strategy, committing both the EU and the Member States;

- o <u>Innovation Union (Smart growth)</u>
- Youth on the Move (Smart growth)
- A Digital Agenda for Europe (Smart growth)
- o Resource efficient Europe (Sustainable growth)
- o An Industrial Policy for the Globalization Era (Sust. growth)
- o An Agenda for new Skills and Jobs (Inclusive growth)
- European platform Against Poverty (Inclusive growth)

B. "Innovation Union" - A Flagship Initiative of "Europe 2020"

Innovation Union points out that; perhaps the biggest challenge for the EU and its Member States is to adopt a much more strategic approach to innovation. An approach whereby innovation is the overarching policy objective, where all policy instruments, measures and funding are designed to contribute to innovation, where the EU and national/regional policies are closely aligned mutually reinforcing, and last but not least, where the highest political level sets a strategic agenda, regularly monitors progress and tackle delays.

Innovation Union contains 10 key initiatives;

- European Innovation Partnerships (EIP) to mobilize stakeholders to tackle major societal challenges, pool expertise and resources and boost the competitiveness of EU industry. The first EIP focuses on the challenges of Demographic Ageing; "Active and Healthy Ageing". As Innovation Partnerships are a novel concept, this partnership is a pilot and a test of this new approach to EU research and innovation.
- o Innovation Union Scoreboard to measure progress
- Improve Access to Finance to scale up EU schemes
- Horizon 2020 the new Research and Innovation program 2014-2020 designed to support "Europe 2020"
- European Design Innovation Initiative to raise awareness of design as a driver of innovation in Europe
- Social Innovation to support social innovators and to promote further social innovation through the European Social Fund

- Public Procurement of innovative products and services
- Standard-setting to enable interoperability
- Europe's intellectual property regime to be modernized
- Structural Funds to boost innovation

C. "A Digital Agenda for Europe" - A Flagship Initiative of "Europe 2020"

Digital Agenda aims to deliver sustainable economic and social benefits from a single market based on Information and Communication Technologies, ICT, and notably, fast and ultrafast internet and interoperable applications.

Digital Agenda points out seven main challenges to be tackled;

- o Fragmented digital markets
- Lack of interoperability (standardization)
- Rising cybercrime and risk of low trust in networks
- Lack of investments in networks
- o Insufficient research and innovation efforts
- Lack of digital literacy and skills
- Missed opportunities in addressing societal challenges

Regarding the last point "addressing societal challenges" the Digital Agenda points out that the deployment of ICT is a critical element for delivering policy objectives like e.g. supporting an ageing society and ensuring the inclusion of persons with disabilities. Further, eHealth can reduce medical costs and foster independent living, also in remote places and the EU needs to remove legal and organizational barriers, particularly those to pan-European interoperability.

There is also an international dimension of Digital Agenda which aims to make Europe a powerhouse of smart, sustainable growth on the global stage – and many of the related policy issues in the seven pillars above, can only be successfully tackled on an international level.

EU Initiatives and Research and Innovation Funding Programmes that offer Support to Seize Opportunities and meet Challenges of Demographic Ageing and to Innovate Elderly Care

At the European Union (EU) level, there are several new and on-going funding programmes and initiatives that respond to the challenge of demographic ageing and related issues such as health and healthcare, social care, chronic health conditions and associated cost. These programmes cover the chain from basic research to innovation and to close-to-market initiatives. Here follows a list of EU initiatives and funding programmes which all, partly or fully, are addressing innovation, challenges and opportunities with Demographic Ageing and Elderly Care including Health, Healthcare, Social Care/Home Care and Rehabilitation.

European Innovation Partnerships on Active and Healthy Ageing (EIP-AHA)
Horizon 2020 – Research and Innovation Programme
European Institute of Innovation and Technology (EIT)
Public Health Programme
Employment and Social Innovation Programme (EaSI)
Active and Assisted Living (AALJP II)
More Years, Better Lives (MYBL)
Joint Programme on Neurodegenerative Diseases (JPND)
Regional & Structural & Cohesion Funds (ERDF, ESF, CF)

These European initiatives and programmes 2014-2020 offer most probably a unique opportunity for European municipalities, regions, and countries (and e.g. stakeholders such as universities, institutes, organisations, industries and users) to thematically and strategically find and make use of possible synergies between the initiatives and programmes to address challenges and opportunities with Demographic Ageing - including to develop innovative solutions for organisations, collaborations, delivery and support of Elderly Care. In this innovation context, the aspect of creating new jobs in industry, economic growth, trades, new markets and exports should be noted. Collaboration with

partners from countries outside EU is possible (in most cases) and promoted, sometimes with a project budget contribution from the EU.

European Innovation Partnerships on Active and Healthy Ageing (EIP-AHA) – a New and Unique European Initiative to Support Innovations and Cooperation in the Domain of Demographic Ageing

The high level aim of the initiative "European Innovation Partnership on Active and Healthy Ageing" (EIP-AHA) is to enable European citizens to live longer independently in good health by increasing the average number of healthy life years by two, by 2020. Further aim, in achieving this target, is to improve the sustainability and efficiency of European social and healthcare systems. Including with the aim is to create an EU and global market for innovative products and services with new opportunities for EU business. Activities in Regions – together with stakeholders - are in focus of this initiative.

The initial five vertical topics and one horizontal topic (the last in the below list), which comprise the current set of "Action Groups" of the EIP-AHA, are the following;

- o Prescription and adherence to treatments
- o Personal health management falls prevention
- Prevention of functional decline and frailty
- o Integrated care for chronic diseases remote monitoring at regional level
- o Interoperable independent living solutions
- Age friendly buildings, cities and environments

Invitations ("Calls") to participate in the EIP-AHA (and in the above mentioned "Action Groups") were announced in 2012 and 2013.

The European Partnership, the EIP-AHA is a unique initiative. It is a new way of cooperation in Europe. It welcomes all stakeholders to participate, from public and private sectors and with a direct collaboration with regions and municipalities, with an interest to work and contribute to the aim of the initiative and to commit their own resources to one/more of the above mentioned Action Groups. The EIP-AHA does not have its own budget for projects, but, as communicated by the European Commission, various existing EU funding programmes have been open, and will open for Calls for Proposals on the above topics. During 2012-2013, 6-7 Calls for Proposals have already been open with topics related to the EIP-AHA. For 2014-2015 there are Calls for Proposals related to EIP-AHA published in e.g. the "Horizon 2020" programme.

To further strengthen EIP-AHA the Strategic Implementation Plan recommends to establish geographical located "Reference Sites" that are able to provide a comprehensive innovation-based approach to active and healthy ageing. An open Call from 29 February to 31 May 2012 invited relevant national, regional and local authorities and care institutions to submit expressions of intent to be a candidate "Reference Sites". The Call comprised six categories of innovation; medication adherence, fall prevention, frailty and malnutrition, integrated care, independent living and age-friendly environments. The "Reference Site" Call resulted in 54 expressions of intent. Self and peer assessment and ratings within the group of candidates took place (the European Commission did not take part in this assessment and rating). Finally, 32 Reference Sites were selected and presented in an EIP-AHA Site Award Ceremony in Brussels 1 July 2013.

For the time being, no further EIP-AHA Action Groups are in plan besides the six existing above mentioned Groups. However, new EU Commissioner/s, after next elections, taking office late 2014 or beginning of 2015 may take the lead and initiate a process to expand the existing set of Actions Groups with new Groups and topics. For the participants in EIP-AHA Action Groups, and in Reference Sites, to optimise the impact of the undertakings, it is advisable to look for synergies with other EU programmes that support innovations and/or policy development in the domain of Demographic Ageing, including the new Regional Funds 2014-2020.

Horizon 2020 - the New EU Research and Innovation Programme for 2014-2020

Horizon 2020, formally launched 1 January 2014, is the new EU Research and Innovation Programme over the seven years 2014-2020 with a budget of nearly € 80 billion (current prices) and is the largest EU R&I Programme ever and one of the largest publicly funded worldwide. This budget is nearly 30% higher compared with its predecessor the Seventh Framework Programme for Research and Technological Development (FP7). Horizon 2020 is designed to implement the strategic approach of the "Innovation Union" which in turn is one of the Flagships of the key EU policy, the "Europe 2020" (smart, sustainable and inclusive growth).

An overall policy of Horizon 2020 is to drive economic growth and create jobs. This can be seen in the light of the financial and economic crisis in Europe and beyond, lasting over several years. The general objective of the Horizon 2020 is to generate excellent science, industrial leadership and tackling societal challenges. International cooperation (beyond EU) will be further promoted in Horizon 2020 and all priorities and specific objectives should include an international dimension.

Horizon 2020 focuses on the following main priorities ("specific objectives"):

1. Generating Excellent Science – seven year budget €24.4 billion

- a. Frontier research (ERC) [€13.1 billion]
- b. Future and Emerging Technologies (FET) [€2.7 billion]
- c. Skills and career development (MSCA) [€6.1 billion]
- d. Research infrastructure [€2.5 billion]

2. Fostering Industrial Leadership (LEIT) – seven year budget €17.0 billion

- a. Leadership in enabling and industrial technologies [€ 13.6 billion]
 - i. Information and Communication Technologies (ICT)
 - ii. Nanotech, materials, manufacturing, processing
 - iii. Biotechnology
 - iv. Space
- b. Access to risk financing [€2.8 billion]
- c. Innovations in SME [€0.6 billion]

3. Tackling Societal Challenges – seven year budget 29.7 billion

- a. Health, demographic change and wellbeing [€7.5 billion]
- b. Food security, sustainable agriculture and forestry, marine, maritime and inland water research, and the bio-based economy [€ 3.9 billion]
- c. Secure, clean and efficient energy [€5.9 billion]
- d. Smart, Green and integrated transport [€6.3 billion]
- e. Climate action, environment, resource efficiency and raw materials [€3.1 billion]
- f. Inclusive, innovative and reflective societies [€1.3 billion]
- g. Secure and innovative societies [€ 1.7 billion]

Horizon 2020 budget also includes funding of the specific objectives "Spreading excellence and widening participation", "Science with and for society", and research activities under the Euroatom Treaty and research activities of the European Commission´s in-house science service the "Joint Research Centre" (JRC), and the "European Institute of Innovation and Technology" (EIT), together approx. €7.5 bn.

Responding to the challenge "Health, demographic change and wellbeing", research and innovation under the Horizon 2020 is an investment in better health for all. It aims to keep older people active and independent for longer and supports the development of new, safer and more effective interventions. Research and innovation topics under the Horizon 2020 are also aiming to contribute to the sustainability of health and care systems.

European Institute of Innovation and Technology (EIT)

European Institute of Innovation and Technology (EIT) aims to foster the integration of higher education, research and innovation through its Knowledge and Innovation Communities (KICs) thereby creating new environments conducive to innovation, supporting a new generation of

entrepreneurial people and stimulating the creation of innovative spin-offs and start-ups. In addition the EIT and its KICs will seek synergies and interaction across the priorities of Horizon 2020 and in particular to the specific objectives of the "Societal Challenges" and to "Leadership in Enabling and Industrial Technologies". EIT is launching Calls for two new KICs - during 2014:

- Innovation for Healthy Living and Active Ageing
- Raw Materials: sustainable exploration, extraction, processing, recycling and substitution

The Call for the above two new KIC applications will close 10 September 2014 and the announcement of the winners is planned for December 2014.

Further on, the EIT plans by 2016 to launch two additional KICs in "food4future" and "Added Value Manufacturing". In 2018, according to plans, a new KIC will be launched on "Urban Mobility".

Of interest in this context is to note the new EIT KIC "Innovation for Healthy Living and Active Ageing" and its tight complementary and supporting strategy to other EU initiatives and programmes (and EU / Member States joint programmes) like e.g. Horizon 2020, the European Innovation Partnership on Active and Healthy Ageing (EIP-AHA), the Active and Assisted Living (AAL) joint programme, the Health for Growth programme and the Regional Funds. This opens up for possibilities to identify and draw strategic synergies by stakeholders like municipalities, regions, universities/institutes, industry, health and user associations, funding agencies etc.

Health Programme 2014-2020 ("Health for Growth Programme")

The third Health Programme, 2014-2020 ("Health for Growth Programme") have a budget of €449 million and focusing on reducing health inequalities and encouraging innovation in the sector - with the overarching objective to support the key EU policy document, "Europe 2020", for an Intelligent, Sustainable and Inclusive Growth.

Part of the new Health Programme will contribute to innovative, efficient and sustainable health systems and will support measures e.g. on the following topics;

- Up-take of health innovation and eHealth solutions
- Health in an ageing society
- o European Innovation Partnership on Active and Healthy Ageing
- Health workforce forecasting and planning
- A mechanism for pooled expertise and good practice assisting Member States in their health system reforms
- o Health Technology Assessment
- o Legislations

The Health Programme 2014-2020 was formally approved by the European Parliament and the EU Council in March 2014. The first Call for Joint Actions and Projects etc. is planned to open during June/July 2014.

Employment and Social Innovation Programme "EaSI" 2014-2020

The new "Employment and Social Innovation Programme" ("EaSI") 2014-2020, has a budget of €920 million to support innovative social policies, promote labour mobility, facilitate access to microcredits and encourage social entrepreneurship. The integrated approach of EaSI and its focus on innovative projects is to support the key EU policy "Europe 2020" (smart, sustainable and inclusive growth). The three mentioned components of EaSI will receive the following budgets;

 Progress; around €550 million, to modernization of employment and social policies e.g. to analysis, learning and exchanges of practices in the field of employment and social policies, and to help Member States to design and implement policy reforms to achieve the Europe 2020 goals. A specific budget is devoted to the areas of youth employment or inclusion.

- **EURES**; around € 160 million, for job mobility e.g. to the EURES Network for information and advice to job seekers wishing to work in another EU country, and to core activities at EU level while national activities can receive funding from the European Social Fund (ESF).
- **Progress Microfinance**; around €200 million, e.g. to support microcredit providers and institutions to develop the social investment market and access to finance for social enterprises and social entrepreneurship.

Currently, May 2014, first Calls for Proposals are open.

Ambient Assisted Living Joint Programme (AALJP) - renewed for 2014-2020

"Ambient Assisted Living Joint Program" (AALJP) was established 2008, initially as a six-year-programme (2008-2013) where 23 EU Member States and Associated Countries, together and with financial support of the European Commission, co-financed projects with the aim to develop innovative solutions for elderly persons, enabled by Information and Communication Technologies (ICT). A second objective of this program is to support business and industry to develop competitive products.

During 2008-2013 six calls for proposals have been launched and co-funded approx. 150 projects.

Preparations have been done to renew, relined and rename the programme for a period of seven years 2014-2020 – the "Active and Assisted Living Joint Programme" – "AAL 2". The final decision and approval about the "AAL 2" was taken by the European Parliament and the EU Council in April 2014.

Under the "AAL 2", the seventh call for proposal, "Care for the Future", is launched with a deadline for proposals 26 June 2014.

More Years, Better Lives (MYBL) - the Potential and Challenges of Demographic Change

The "More Years, Better Lives" (MYBL) is an EU Member-State driven research programme in collaboration with the European Commission, a "Joint Programming Initiatives" (JPI), which seeks to enhance coordination and collaboration between European and national research programmes related to demographic change. The programme will focus on multi-disciplinary research. The programme has initially initiated the following research areas;

- o Health & Performance
- Social Systems & Welfare
- Work & Productivity
- Education & Learning
- o Housing, Urban & Rural Development & Mobility

The MYBL launched in April 2014 its "Strategic Research Agenda" which defines priorities for research and policy making in the following four domains of demographic impact on society;

- Quality of Life and Health
- Economic and Social Production
- Governance and Institutions
- Sustainability of Welfare in the EU

Ultimately the project and the JPI seek to strengthen the base of multi-disciplinary and holistic ageing research and to provide scientific evidence for policy responses to demographic change.

The first MYBL Call for project proposals is expected during 2015.

Joint Programme on Neurodegenerative Diseases (JPND)

The "Joint Programme on Neurodegenerative Diseases" (JPND) is an EU Member-State driven research programme. JPND is a collaboration between 26 Member States (and one third country) and the European Commission.

JPND Research in Alzheimer's is a first priority area with reasons that Europe has a rapidly ageing population. and currently. Alzheimer's and Parkinson's are debilitating and largely untreatable conditions that are strongly linked with age. Dementias are responsible for the greatest burden of disease, with Alzheimer's disease and related disorders affecting over 7 million people in Europe, and this figure is expected to double every 20 years as the population ages.

JPND has launched annual calls for proposals since 2011.

EU Regional, Structural and Cohesion Funds 2014-2020

The total EU budget ("ceilings") for the years 2014-2020 is €1.083 billion (current prices), and out of this, €352 billion, roughly a third of the EU budget, is allocated for the Cohesion Policy - to the EU Member States, their Regions and Cities. The key priorities include innovation, tackling unemployment, supports for SMEs and the low carbon economy in all sectors. The overall aim with these Funds is to implement the key EU Policy Europe 2020 - smart, sustainable and inclusive growth – and the three Funds are the following:

❖ European Regional Development Fund (ERDF), including e.g.

 European Territorial Cooperation (ETC) [former the INTERREG programmes] will include cross-border ("A" strand), transnational ("B" strand) and interregional ("C" strand – "INTERREG EUROPE") cooperation.

ERDF priorities "Investing in Growth" include:

- Innovation and Research (smart specialization strategies a place-based strategy for opportunities in the local economy)
- Information and Communication Technologies (ICT The Digital Agenda)
- o Competitiveness of SMEs
- o Low-carbon Economy in all sectors
- ❖ European Social Fund (ESF) ESF priorities "Investing in People" include:
 - Employment and Mobility
 - o Better Education training lifelong learning
 - Social Inclusion combatting poverty
 - Efficient Public Administration

<u>BUDGET</u> 2014-2020: ERDF+ESF= €284bn (and thereof ERDF maximum share €203.7bn and ESF minimum share €80.3bn)

- Cohesion Fund (CF), priorities include:
 - Environment renewable energy energy efficiency
 - o Trans-European Networks transport infrastructure

BUDGET 2014-2020: CF €63.4bn

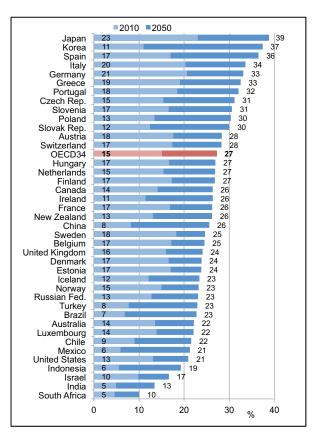
Based on the lessons learnt during the previous programming period (2007-2013), the European Commission prepared end of 2012 for each Member State a "position paper" with the Commission's views on the main challenges and funding priorities. This also initiated the intensive work to develop a Partnership Agreement (PA) between Member States and the European Commission and Operational Programmes (OP) for the period 2014-2020.

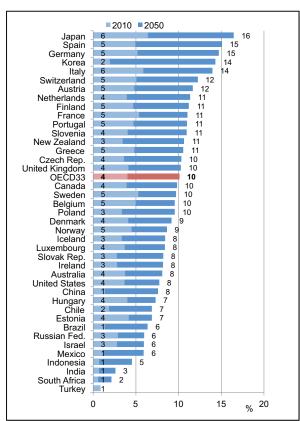
Member States and Regions have to make clear up front what objectives they intend to achieve with the available resources from the Funds 2014-2020. This process and negotiation, currently ongoing, between the Member States and Regions (and stakeholders) and the European Commission will lead to two jointly agreed key documents; the "Partnership Agreement" (PA) per country and thereafter, the "Operational Programmes" (OP) [and for some regions "Action Programmes"], which will be the practically leading document to implement the Funds. The general rule is that the PA should be adopted by August 2014 at the latest and the OP should be adopted by January 2015 at the latest. The actual date of adoption will vary between the Member States.

Further, of strategic importance is to know and consider the possibilities to jointly use and strategically coordinate between the Funds (e.g. ERDF, ESF, CF) and other EU programmes (e.g. Horizon 2020, European Innovation Partnerships, Programme for Employment and Social Innovation, and the upcoming EIT-KIC on Innovation for Healthy Living and Active Ageing) and national/regional programmes to plan for strategic synergy effects, to maximize impact and avoid fragmentation.

If a Member State and/or a region like to make the challenges and opportunities with Demographic Ageing, Health and Innovation to a strategic priority during 2014-2020 there are ample of such coordination and synergy possibilities (e.g. based on innovation, research, smart specialization, innovation procurement, growth, new jobs, health, healthcare, inclusion, ICT-Digital Agenda). If this is of interest for a country/region do not forget to include such policies, strategic priorities and strategies in the Partnership Agreement and in the Operational Programme. This is a possibility to use the taxpayers' money more efficiently and minimize fragmentation. The initiative to specifically define and use such possibilities for coordination and synergies lays on the Member States and the regions (not on the European Commission although Commission is promoting to find synergy possibilities).

The following charts show, to the left, the share of the population aged 65 years and older, 2010 and 2050, and to the right the share of the population aged 80 years and older, 2010 and 2050. Source: OECD, Health at a Glance 2013, OECD Indicators.





=====END OF OVERVIEW AND SUMMARY======

PART 1 – Addressing Demographic Ageing Meeting Reports

Almere Municipality, The Netherlands

Response to Demographic Ageing "Verzilvering" and Social Care Needs
Innovations in the Delivery of Social Care and Social Support in Almere,
The Netherlands

- enabled by ICT, eHealth & Technologies, tools and service

The text below is a summary based on a meeting and discussion between Silas Olsson and:

Wytse Miedema, Manager, Ageing Well Program, Almere Municipality, The Netherlands

Text endorsed by Mr. Miedema, July 24, 2013

Background - Challenge - Policy - Goal

The municipality of Almere in the Netherlands has a population of approximately 195 000 and nine per cent of the population is 65 years of age or older (the Netherlands has a population of 16.8 million of which 16% is 65 years of age or older).

Almere is a new town, established in 1976 on land which was previously the bottom of the Markermeer Lake. In an agreement with the NL Government, Almere municipality plans to grow to 350 000 inhabitants by 2030. A number of initiatives are on-going to facilitate this growth.

Two of these initiatives are "Almere Smart Society" initiated by the city's Economical Development Board on a high and strategic level and the program "Senior-Live.nl" ("Silvering Society") on a more grass root level, initiated in 2009 by the City Board to respond to the demographic ageing trends, even though Almere has a generally younger population.

The overall aim of the program is to develop a user needs-oriented innovative delivery model for social care services, including innovative Homecare solutions to give support to active and healthy ageing, and to enhance citizen participation in society activities by using modern technology.

On-going developments and projects – industry involvement

Industries are heavily and strategically involved in both Almere Smart Society and the "Senior-Live.nl" program both offering a strategic platform for partnership and include the participation of multinationals such as Cisco, IBM, Microsoft, Philips, Living PlanIT, Liander and a range of local and regional SMEs. Included in this partnership is knowledge institutions of which TNO is presently the most prominent one.

In cooperation with the industries, visionary documents, strategic plans and implementation road-maps are drafted, to be approved by the City Board. At the top of the agenda is a vision to make sure "a smart and connected city" (e.g. with fiber optic connections to all households) in areas as e-care, e-health, e-inclusion, and efficient use of energy including smart lighting in public roads and places.

One of the first results from the partnership with industry, about to be introduced step by step, is the "Urban Operating System". The goal of the Almere municipality is to offer a

citywide platform for digital services, making it easier for service providers to cooperate and to deliver services to individuals through standardized building digital interfaces, and making it easier for companies and individuals to form collaborations and communities.

This is a triple win situation as the Municipality gets access to highly qualified staff in participating companies, the companies can interact with the public sector specialists and test solutions in an innovative environment, and SMEs get opportunities to link up with larger companies. Information and Communication Technologies (ICT) are key components in the service development and innovations.

European perspectives

For a municipality of the size as Almere, it is a difficult challenge to be an active part of the "European System" of EU-programs, projects, innovations, and other initiatives, although these activities are regarded as very important. Exchange of experiences and views between municipalities and regions facing similar challenges are of significant value, and a European arena for such interactions is welcome.

Almere is seeking to get in contact with municipalities in Europe, which wish to cooperate and have an active dialogue on similar challenges and subjects as described above. Almere is also interested in forming strategic alliances with municipalities to mutually explore possible innovations and technological enabled innovations in the above described domain.

References and information:

http://english.almere.nl/

http://www.cisco.com/web/about/ac79/docs/ps/Ageing-Well-in-the-Netherlands Success Story IBSG.pdf

www.senior-live.nl

http://www.economischoffensiefalmere.nl/en/ictandmedia

Pictures: Choir online rehearsal where part of the choir is at a distance. The choir "Jong van Hart Almere" (Young at Heart Almere) sing only Rock'n Roll songs from the 50's and 60's. They are the first choir for elderly persons in Almere that have online rehearsals via web based video connections.

The Mayor of Almere, Mrs Annemarie Jorritsma, president of the Association of Dutch Municipalities and former vice-prime minister of the Netherlands, is a strong advocate for innovations and the use of modern technology.

Pictures courtesy - Almere Municipality Office.





Region Gelderland, the Netherlands

Response to Demographic Ageing and new Demands in Care of Seniors New Services and Integrated Care Solutions

- enabled by new mobile mainstream ICT, eHealth & Technologies, tools and services

The text below is a summary based on a meeting and discussion between Silas Olsson and:

André Hermsen, Senior Project Leader, Care Innovations, Sensire, The Netherlands

Text endorsed by Mrs. Steenmeijer and Mr. Hermsen, October 28, 2013

Background and Challenges

The population in the Netherlands is 16.5 million and the population in the province (region) Gelderland of the Netherlands is 2.0 million inhabitants. In the Netherlands 15.3% of the population are 65 years or older and in Gelderland the 65+ part of the population is 15.6%.

Demographic ageing is one of the challenges in the Netherlands. By the year 2030 the 65+ part of the national population is expected to reach 24.1%, and in the province of Gelderland 24.7%.

In the province of Gelderland, Sensire, a not-for-profit organization, is the main provider of health, home social services, home care and sheltered care of seniors and chronically ill persons. Sensire provides mentioned kind of services to approx. 11.000 clients, and in addition provide about 50.000 counseling service events annually for young people (mainly teen ages). Sensire is established since the year 1950. Sensire has a staff of 5.400 persons and its turnover in 2012 was 170 million euro.

Sensire is also operating a call-center, a nation-wide services, staffed by nurses. The call-center receives and checks ECG's and heart rhythm's on-line remotely from patients nationwide, after visiting a local physician in primary healthcare or after a local hospital event, to ensure health, to monitor status, and to allow a follow-up at home instead of staying longer in hospitals. This service and appropriate equipment are prescribed by the local physician. On an annual basis, the center checks about 3.000 ECG's and 60.000 heart rhythm's measurements from about 30.000 patients nationwide.

Municipalities and provinces are usually purchasing the home social services, home care services and sheltered care etc. on a two-year contract by public procurement - based on quality and price. Currently a political debate is ongoing in the NL about how to shift and balance the cost burden between the central government and the municipalities/provinces. The debate includes e.g. that the cost of the welfare services (hygiene, dressing, cleaning etc.) at home stays with the municipalities/provinces and the cost for healthcare at home is to be transferred from government to local authorities. Cost for sheltered care will stay by the government, however, this kind of care is strongly decreasing in the NL due to wishes to stay at home. If this transfer will take place, municipalities and provinces will be much more eager to develop and introduce innovative and integrated social care and healthcare solutions.

On-going development and innovation in the delivery of home care & services

Sensire, as other care providers, is influenced by the changing environment in the NL. Sensire is committed to continue to develop and introduce highly innovative solutions that improve and impact care and services, work processes, organization, giving new tools to staff, and support and interact with the elderly clients and their relatives. On top priority is to develop efficient and integrated solutions with all actors involved in care of elderly persons, not the least between social care/welfare home services and healthcare - both primary healthcare and hospital care. Here efficient interoperable information systems are crucially needed to develop better and more efficient quality care and services. Sensire sees ICT (Information and Communication Technologies) as strategic for enabling innovative solutions to meet with these challenges.

Sensire has been keen to develop and use ICT enabled innovations in elderly care since about 10 years. One of the first developments, some 10 years ago, was to develop and use video-interactive TV-equipment between older persons at home and staff to make video visits more often to support the older persons, to assess their needs, adapt physical visits accordingly, and to avoid unnecessary travels. However, the technology at the time was not enough user-friendly and there was a lack of programs to support different services.

In line with current mainstream information technology developments and use of mobile technologies, new innovative possibilities for developing the delivery of elderly care arrives. On January 2012 Sensire decided to start such developing work by using the iPad (a tablet computer marked by Apple) with its video-interaction facility "FaceTime". Sensire wanted a tablet computer with a video-facility recognized ("approved") by a government or a reimbursement authority/organization to be used in health/healthcare for distant consultations between two or more parties (see references).

In January 2012, after training, each head nurse of the 140 teams working in home services for elderly was provided with an iPad, and five seniors belonging to each of the teams got an iPad as well. As the staff, the nurses and the team, and the seniors themselves, have the best knowledge about the daily need they got the freedom to innovate and test different uses of the tablets. One of the obvious first uses was to use the tablets to video-interact with seniors having diabetes to support them when making insulin injections themselves. Before the use of tablets, the seniors had to inject the insulin during the scheduled visit at home by the staff team. With the use of tablets and video-interaction, more flexibility and adapting to the need of seniors, about when and where to receive support with injections was introduced.

During 2012 different uses of iPad were tested and introduced. The vast majority of the seniors had no difficulties, after some training, to use the tablets and its video-interaction facility. Currently (October 2013), about 1.200 seniors in the provinces of Gelderland are using the tablets and its video-interaction facility together with the home services teams of Sensire. It is highly appreciated by the seniors and by the staff-teams. Applications are currently being developed by a software company and include e.g. easy interface for contacts with the staff-team and family members and information about diseases e.g. heart problems, diabetes and COPD. Programs to support self-management and monitoring of heart problems and COPD are already in place and next in development are programs to support self-management and monitoring of other chronic health conditions. On the agenda is to introduce different types (manufactures) of tablets, PC's and smart phones in the home care/services for seniors.

To develop innovative, integrated care solutions are at the top of the agenda and on-going. For example, together with some 60 physicians in primary health care centers, the tablets and its video-facility are used to simultaneously connect and interact with seniors, his/her family members and the staff-team-nurse, all in different locations, to coordinate care, and in agreement with the senior (and family) propose and agree on the next steps of care actions.

Another integrated care solution, currently being tested, is multidisciplinary medical meetings together with the elderly, his/her family and the staff-team-nurse. Here, different medical specialists, the primary health physician, needed for co-ordination of care, are all using tablets with its video-facility to simultaneously connect and interact with the senior, his/her family members and the team-nurse, all at different locations. The need of the seniors and decision-making together with the seniors, are the centerpiece of the meeting.

Work to support integrated care solutions is ongoing, on a local basis, to interconnect the medical records (in hospitals and in primary healthcare centers) with nursing care records in homecare of older people and chronically ill persons. The challenge is not any more technical, but some legal barriers still exist. This is also a work and concern on the national NL basis. However, to develop and introduce innovative, efficient and integrated solutions, such interconnection is deemed urgently needed to meet the need of the today's seniors.

European perspectives

Sensire strongly believes in cooperation, also internationally. For example, Sensire takes part in the EU supported project Conneced vitality and Virtask and is positive to take part in European projects.

References and information:

www.sensire.nl www.zdnet.com/blog/apple/facetime-calls-are-encrypted-and-hipaa-compliant-when-using-properencryption/11166 www.connectedvitality.eu www.virtask.nl/wp/en/

Pictures: The pictures below show some of the uses of tablet computers in the region of Gelderland in the NL to support seniors at home, in addition to physical meetings – pictures show interactions between the seniors and the staff. **Pictures courtesy – Sensire, NL.**









Flanders Region, Belgium

Response to Demographic Ageing and New Demands in Care Sector

Innovations in the Delivery of Health and Social Care in Flanders, Belgium

– enabled by ICT, eHealth & Technologies, tools and services

The text below is a summary based on meetings and discussions between Silas Olsson and:

Peter Raeymaekers and Katrien Kimpe, former and current Coordinator Flanders Care, Flemish Community, Belgium

Text endorsed by Mrs. Kimpe, August 01, 2013

Background - Challenge - Policy - Goal

The Flanders region in Belgium has a population of 6.2 million and 18% of the population is 65 years of age or older. However, the population in Flanders, like elsewhere in Europe, is ageing rapidly. This demographic change brings forth challenges and yet opportunities.

As a response, Flemish Government has established a general framework "Flanders in Action" on its way to positioning Flanders as an internationally leading region in the knowledge-based economic era. Approximately one hundred civil society organizations, covering a wide array of economic, ecological and social fields, are involved in the realization of the major policy initiatives.

One of Governments´-policy initiatives, within "Flanders in Action", is the program "Flanders´ Care", which will provide support to stimulate maximum social and economic added value thanks to innovation and entrepreneurship in healthcare and social care whilst addressing budgetary constraints due to demographic challenges and expensive new technologies.

Flanders´ Care focuses on those areas in which optimal use can be made of Flanders´ regional competences. For this reason, the main focus is on prevention, home care and use of Information and Communication Technologies (ICT) in general and specifically to enable safely data sharing about care and welfare among various care providers. The mission statement of Flanders' Care is to measurably improve the quality of care through innovation and responsible entrepreneurships.

The Chairperson of the Board of Flanders' Care is the Flemish Minister for Welfare, Public Health and Family Affairs.

On-going developments and projects – industry involvement

The 'Entrepreneurs Office" has been established as a general gateway and as a one-stop-shop to reach out and interact with target groups and to support currently involved and new stakeholders to lower the barrier to the relevant instrument and policy measures and by providing accessible information tuned to the target audience. There are dedicated innovation advisors' that help SMEs discover their innovation potential.

As instruments to stimulate innovation the Flemish Government uses subsidies for 'demonstration' projects where companies in cooperation with care institutions can demonstrate solutions that enable older people or people with chronic health conditions and/or disabilities to increase their quality of life in their home situation.

Within all initiatives and projects, commercialization efforts will consistently be developed with an international market perspective.

European perspectives

Flanders´ Care internationalizes by linking up more closely with European and international context, programs and partners. Flanders´ Care, already involved in international initiatives, is searching for international partnerships as the challenges are the same in an increasingly globalized world. For example, Flanders is lead partner of "CASA", an EU Regional Fund Interreg IV C program project with a duration of 36 months, linking up 12 European regions with the aim of speeding up innovation, up-take and rollout of solutions, in the domain of active and healthy ageing.

Experiences and thoughts include that legal frameworks for care (delivery, products, infrastructure, etc.) are often regional, and SMEs often produce for the local market and care organizations rarely reach beyond their national borders. While Europe is promoting smart specialization, regions lack the general overview and therefor risk investing in solutions that already exist elsewhere in Europe. Exchange of insights and best practices would lead to stronger regional policies that have international backing. Better coordination of this in Europe would lead to better international positioning of the regions and its companies, also for the SMEs. Better coordination would lead to more accessible European and international markets and ultimately to a faster implementation of care innovation throughout Europe.

Reference and information:

http://flanders-care.be/en/

Picture: "The BlueCall Phone", a Flanders's Care demonstration project, guiding people with mental disabilities in their everyday movements/lives.

Picture courtesy - Ithaka VZW.



France

Response to Demographic Ageing

Innovations to Support Independent Living, Autonomy and Health at Home in France

– enabled by ICT, eHealth & Technologies, tools and services

The text below is based on a meeting and discussion between Silas Olsson and:

Prof. Alain Franco, President, Board & General Assembly Chairperson, Centre National de Référence (CNR-Santé) - Santé à Domicile and Autonomie ("Health at Home and Autonomy"), Nice, France

Mr. Bruno Charrat, Director General, Centre National de Référence (CNR-Santé) - Santé à Domicile and Autonomie ("Health at Home and Autonomy"), Nice, France

Text endorsed by Prof. Franco and Mr. Charrat, June, 2012

Background - Challenge - Policy - Goal

France has a population of 65 million and 17% of the population is 65 years of age or older.

To support growth of small and medium sized companies (SME) in the country, the French government established, 6 years ago, about 65 competitiveness development centers ("Pôle de compétitivité") across France. These poles locally federate industrial groups, SME and academics to develop collaborative works. Many of those centers are driving actions on technology enabled innovative solutions in the health domain. Some three years ago, it became clear that the continuously growing need to develop innovative solutions to respond to demographic ageing, to develop well-being and ways to cure and care people at home, called for more attention. This should also be seen in the light of rising concerns and tensions about the economical sustainability of the health and social care systems.

To respond to this growing need, and to support the industry support centers in the context of innovations related to demographic ageing, the French government (Ministry of Industry and part of the Ministry of Economy and Finance) initiated a call to establish a support organization on a national basis. Finally, organizations from four regions, Provence-Alpes-Cóte d´Azur (PACA), Rhone-Alpes, Midi-Pyrenees, and Limousin, established the "Centre National de Référence (CNR-Santé) - Santé á Domicile and Autonomie" ("Health at Home and Autonomy"), in Nice, which is supported (also financially) by the French government. The CNR-Santé was up-and-running in mid-2010, now staffed with eight persons and with an authorized budget of €8 million over three years.

The CNR-Santé board council incorporates members of the Founders, Industry, Academics, Associations representing users, Financing and Policy makers. The CNR-Santé has established three committees, with persons representing SMEs and large industries, insurance organizations as well as public stakeholders, in the following three sectors, Strategy, Science and Ethics.

The core aim of the CNR-Santé is to "get the French industry ready and not left behind"- for developing technology enabled solutions in area of healthy and active living and aging at home and – to gather and develop the knowledge needed to support the SME centers to support the industry. Further, to establish a national network of private and public stakeholders (bringing stakeholders together) to create a dynamic market in France for ICT and technology enabling innovative solutions for independent living, health at home and autonomy. The CNR-Santé is a one-stop shop and a showroom of what is existing (solutions, practices) for players and stakeholders.

On-going developments and projects - industry involvement

Across France, industry has access to the 65 "industry poles" and the CNR-Santé is currently developing a close collaboration with a number of the poles for supporting them with strategic knowledge and information for the benefit of the industry in their regions.

The French government has recently launched the program "Invest for the Future" with a budget in excess of €35+ billions. The CNR-Santé is actively supporting industry to apply for budgets for projects for innovative solutions in the area of independent living, health at home and autonomy.

The CNR-Santé is also involved in work related to interoperability and standards, and on the topic of business models for the solutions to be developed and put on the market.

Although there are niche markets in the area of independent living, health at home and autonomy (e.g. home security, home safety and personal social alarms) the market as a whole is in its infancy. However the market is growing and the potential is enormous. The current market constraints, challenges and opportunities are taken into account of the CNR-Santé in its interaction with industry and other stakeholders.

European perspectives

There is a need in Europe to create a network of agencies and organizations with similar tasks like the CNR-Santé for cooperation, exchange experience and to take mutually needed initiatives.

Reference and information:

http://www.cnr-sante.fr/

Pictures courtesy - CNR-Santé





Friuli-Venezia-Giulia (FVG) Region, Italy

Response to Demographic Ageing, Service Quality and Financial Climate

Innovations in the Delivery of Health and Social Care Services & Solutions in the Region of Friuli Venezia Giulia (FVG), Italy

- enabled by ICT, eHealth & Technologies, tools and services

The text below is a summary based on meetings and discussions between Silas Olsson and:

Giulio Antonini, Dr,

Area Welfare di Comunita, Friuli-Venezia-Giulia (FVG) Region, Italy

Gianni Cortiula.

Regional Central Director of Health and Social Policies, FVG Region, Italy

Roberto Molinaro,

Regional Minister for Education, Research and Innovation, FVG Region, Italy

Stephen Taylor,

Chief Executive Officer, AREA Science Park, FVG Region, Trieste, Italy

Paolo Da Col, Dr,

MD, Azienda Servizi Sanitari, FVG Region, Trieste, Italy ["Dreaming" project]

Barbara Dodi

Televita, Trieste, Italy ["Dreaming" project, and FVG Social Alarm provider]

Giovanna Ghirardi

Social Services manager, Municipality of Trieste, Italy ["Back Home" project]

The physical meetings with the above mentioned persons took place during January 2012.

Text updated and endorsed by Dr. Giulio Antonini, and Dr. Matteo Apuzzo, September 27, 2013

Background - Challenge - Policy - Goal

The Friuli-Venezia-Giulia (FVG) Region has a population of 1.2 million and 23% of the population is 65 years of age or older. In the region, 55.000 older people are currently dependent on community support. Due to demographic ageing, 100.000 older people are expected to need community support by the year 2051.

Currently, 10.500 older persons are staying in approximately 190 nursing homes.

The policy is to support older persons to be able to stay longer at home, as independent as possible. To facilitate the recruitments of needed staff in home care services, fortunately about 15.000-20.000 foreign family assistants are employed; however, it is estimated that an additional +50% non-regular workers work in home care services.

In 2004-2006 the FVG Region gradually strengthened the integration of its public policy for health care, social care and innovations, and associated financial instruments, to support older people living at home as long as they wish to. This was done for the two main reasons; 1) to enhance the quality of life; and 2) to respond to the financial circumstances and challenges ahead because of demographic aging, as the current model and system are not sustainable. This integrated policy focuses on older people but also includes other persons with specific needs, e.g. disabled persons. In line with this policy, development of integrated

care solutions (health care and social care, and other services) is on top policy priority. Public-Private collaboration in service delivery to older people (e.g. home care) is supported and quality of services is very high on the agenda. In fact, the quality is highly supported by the public procurement process, and also by regional law, as quality is weighted 85% and price weighted 15% in the contract awarding process. (Regional law since 2006; "Integrated system of interventions and services for the promotion and protection of the rights of social citizenship").

Regarding innovation, a regional legal framework has been in place since 2005 in the FVG region to support innovations and to support private-public stakeholders in partnerships, to innovate together. The main regional funding instrument is the Law of Innovation 26/2005, that includes a specific article (art. 22) on innovation in the welfare sector.

In this framework, the FVG region is welcoming researchers, innovators, entrepreneurs, and companies from outside the region and internationally. A priority is to support innovative solutions in the context of demographic ageing e.g. to support older people to be able to stay longer at home with increased quality of life including more autonomy. A priority in parallel is to support innovations to provide a better quality of life for persons who stay in institutions, such as for long term care. ICT and technology enabled innovative solutions (products and services) are seen as a key component in this development.

In order to consolidating and further developing collaboration between public and private actors dedicated to research and technology based innovation for independent living of older and/or disabled people, the Regional administration is actively involved in fruitful networking with a high number and variety of stakeholders in the field of innovation, ICT, health and social care. This relationship has been recently structured through an official act, which establish a "Public Private Partnership devoted to research and innovation in the field of technology for ambient of living in FVG Region" ("FVG as a I@b").

ICT enabled solutions for independent living and active ageing are encouraged in order to promote the culture of accessibility of dwellings and of all ambient of living. Such a partnership will also facilitate participation in multi-disciplinary projects for research, development and innovation at international level.

Ongoing developments and projects

To develop integrated care solutions and to support older persons and disabled persons for independent living, the FVG region has promoted several projects, actively involving municipalities, local health authorities, research and innovation centers, such as:

- "Back Home" project, which formed a formal collaboration between the health- and social policy domains. The project started 2010 and resulted in adapting flats with domotics solutions for physical and learning/mental rehabilitations, now in use to train and prepare individuals for living independently.
- "Dreaming" project, partially EU funded, resulted in new tools and services, now in use, for different chronic health conditions, such as sensors to measure/alarm for weight, blood pressure, glucose, oxygen, spirometer measurements, and sensors for movements, smoke and water leakage – with vital sensors connected to a 24/7 callcenter.
- "Refreedom" project aims to support people with orientation difficulties both indoor and outdoor, by using knowledge from the domain of home automation technologies.
- "LAK (Living for All Kitchen) Project" is an industry lead partnership project involving regional research centers and the FVG region. The aim is to integrate home technologies in the kitchen-environment to support independence of people with slight mental disability.
- "SmartCare" is a newly started project, partially EU funded, bringing together 24

regions in Europe and their stakeholders with the aim of joining up ICT and service processes for quality integrated care in Europe.

A strategic resource and platform in the FVG region for R&DI and business creation is the "AREA Science Park" in Trieste, which brings together stakeholders from industry and the public sector. The AREA Science Park also provides coordination of some 50 R&DI centers located across the FVG region.

Currently about 70 companies are operating in the AREA Science Park with a total staff, public and private, of about 2.500 persons. Innovative solutions for older people and people with disabilities are a domain of priority. Key of the centers in this platform is to early assess ideas with a market perspective, help innovators and entrepreneurs as a one-stop-shop, and to bridge the gap between project results and market & businesses – and to create new jobs. Other two important research and innovation centers are "Friuli Innovazione" in Udine and "Polo Tecnologico" in Pordenone.

Industry involvement

Industry works closely together with public stakeholders to foster innovations, which is strategically supported by policy makers in the FVG region. The industry is heavily involved in finding attractive and efficient solution for examples to adapt existing products to the need of the individuals for rehabilitation purposes. This includes, for example, the company Snaidero for kitchen and bathroom adaptations and IKEA for furniture. New materials are tested that resist both high and low temperature and support the blind or persons with limited sight. ICT-based solutions are used for services like social alarms and house safety/security alerts and to remotely control building facilities such as windows, doors, kitchen tools, etc.

Information and communication technologies, ICT, are seen as a key to enable services for social innovation, including developing new models of service delivery in the health and care sectors, and to support work processes, organizational and system development.

European perspectives

There is a strong support from the political level in the FVG region to support European collaboration for social innovation, with the view of demographic ageing challenges, which includes e.g. to participate in European Union funded projects (such as HELPS Project funded by the Central Europe Program and CASA project funded by Interreg IVC).

The initiative of the European Commission, "European Innovation Partnership on Active and Healthy Ageing (EIP-AHA)" is regarded as strategic and very useful. The FVG region is active in the Partnership's three actions, innovation for;

- ✓ Interoperable independent living solutions
- ✓ Integrated care solutions
- ✓ Age friendly buildings, cities and environments

In addition, in this European Partnership, the FVG region - Instituto Regionale Rittmayer - is recently awarded the status as a Reference Site in the field of services for blind and visually impaired people of all ages, in education, rehabilitation, social and labour integration, recovery and development of skills.

Collaboration with neighboring countries in the context of demographic ageing is on-going and important, and FVG is open for further such collaborations.

The on-going regional planning of the next EU European Regional Development Funds (ERDF) for the planning period 2014-2020 and towards the Horizon 2020 Framework Program for Research and Innovation are seen as strategic.

References and information:

AREA Science Park

www.area.trieste.it

Projects:

Back Home

http://www.retecivica.trieste.it/prestoacasa/

Dreaming

http://www.dreaming-project.org/

Refreedom

http://www.refreedom.eu/

LAK Project

http://www.progettolak.eu/

SmartCare

 $\underline{\text{http://ec.europa.eu/information_society/apps/projects/factsheet/index.cfm?project_ref=32515}\underline{8}$

Picture: In the new flats developed for rehabilitation in Trieste, in collaboration between the health and social policy domains and with industry, different tests are on-going including test of different materials to support e.g. the blind or persons with limited sights.

Picture Courtesy - Uff. immagine comune di Trieste.



Basque Country, Spain

Response to Demographic Ageing

Innovations in the management of chronic care conditions in the Basque Country, Spain

- enabled by ICT, eHealth & Technologies, tools and services

The text below is based on a meeting and discussion between Silas Olsson and:

Dr. Rafael Bengoa Renteria, Former Minister of Health and Consumer Affairs, Basque Government, Spain

Prof. Olga Rivera Hernaez, Former Deputy Minister, Quality, Health Research and Innovation, Basque Government, Spain

Text endorsed by Dr. Bengoa and Prof. Rivera, September 17, 2013

Background - Challenge - Policy - Goal

The Basque Country, Spain, has a population of 2.5 million and 19% of the population is 65 years of age or older.

The demographic ageing contributes to a change in population epidemiology and thereby the range of health challenges, including management of chronic diseases and chronic health conditions. About 80 percent of healthcare resources are linked to management of chronic diseases. The healthcare system and organisation are traditionally based on handling acute care situations and not long term chronic conditions. Changes are needed.

To respond to the economically and healthy non-sustainable way of handling chronic care patients with the present healthcare model, a "Health Policy Programme" was commissioned by the Basque Government in 2009, with the goal to transform the whole system and the model of provision, with the mind on the delivery of care for patients suffering from chronic illnesses. This means, for example, to integrate different levels of health care (primary and hospitals), coordinating health with social care, minimize hospital-based care and support primary care solutions, adapting the answer to the patient's level of health risk, incorporating home-based, remotely supported and mobile care solutions. The aim is to support self-care management, independence and mobility. To support all these changes, innovation and solutions enabled by ICT and technologies are crucial.

On-going developments and projects

Strategic initiatives are commissioned which focus on healthcare and social care innovations and integrations including access and delivery of care, organizational development and the shift from hospital care to primary care, and to home care and mobile care solutions. The initiatives include system, organization and process development, and use of ICT as an enabling component is key.

A national Spanish "Ageing Consortium" was set-up in 2011 in the Basque Country in collaboration between the Basque and Spanish Governments. To start with the Centre has focused on applied research (KronikGune and Etorbizi were important structures to accomplish that goal) and later it was established in 2012 a basic research framework CNIE

(Centro Nacional de Investigación en Envejecimiento) that would be fully operational, in a three year time frame; the Centre will work in a network of 300-400 staff and researchers and will work within the Ageing Domains of basic research and research on health and social care systems.

The Basque model is recognized as a model to be applied in the whole country, Spain, and the Spanish Ministry of Health has launched a Chronicity Strategy to influence the Autonomous Communities to advance in that direction.

Industry involvement

The Basque Government supports and applies the "global logic" view in the meaning that industry from abroad is most welcome to develop and test solutions in close cooperation with the public health system, as well as local, regional and national industry; and also in its commitment to develop solutions designed to be easily adapted to the needs of other Health Systems. Basque Government is conscious that an adequate scale is the only way for achieving cost-effective solutions, and this scale requires a multi-country market to be achieved. It is important to cover the total value chain from development to market entry, market take-up and adoption by the end users. The aim is to create a "Living Lab – Basque Country" to attract industry to develop and test solutions, but the final goal is to speed up innovations to other regions in order to improve and achieve the economies of scale in the products and services incorporated, that could help the transformation of the health and care systems as previously described. The Basque Government is convinced that close cooperation with the industry is a must to find such innovative solutions.

The organization INNOBASQUE is the Basque Innovation Agency, established in 2008 to support strong collaboration between the public sector and industry to support the journey from idea to innovation, testing and practice. The Agency supports innovation in the following five areas: Social development; Economic development; Sustainability; Health Care and Quality of Life; and New Scenarios.

European perspectives

The Basque Government sees that innovation and change in the way care are accessed and delivered related to demographic ageing, changing epidemiology and change in health panorama, are needed for many reasons, including demand from the public, patients and relatives, professionals and for a sustainable economy. Enabling technology will play a crucial role.

However, it is a challenge to find innovative workable solutions and any evaluation takes time. Therefore, the Basque Government aims to establish contacts and collaborate with other regions and health providers in Europe that are, or plan to, work with demography health-related challenges for mutual support and for exchange of views and experiences.

Since December 2012 after the elections, a new Basque Government has been formed. The new team leading the Health Strategy has confirmed the continuity of Chronicity Strategy in the new mandate.

THE BASQUE COUNTRY DECLARATION - Basque Government, published September 2012

Towards a product and service development model that will improve the sustainability of the Health and Social Care Systems, provide a better, more people focused care, and which will generate a competitive Europe-wide industry based on innovation and internationalization.

Main drivers:

- 1. Health and Social Care models with universal and equitable access in Europe have ensured, through public financing, the health and social welfare of their citizens.
- 2. Health and social care systems must face up to the challenge of caring for an increasingly elderly population with a higher prevalence of chronic diseases.
- 3. There is a need to build a new model of provision of social and health services that can respond to the challenges of chronicity and ageing, and to do so in a sustainable manner, guaranteeing universal and equitable access for all citizens.
- This new model of provision will be possible through enabling the incorporation of technological innovation based on rigorous and demonstrable standards of transparency and accountability.
- **5.** The new products and services to be incorporated should be developed, manufactured and marketed in a way that will ensure cost effectiveness.
- **6.** Improved cooperation between public and private actors, between different public authorities, and between regions will allow the co-creation of products and services designed for increased cost-effectiveness and a reduction in the adoption time.

Main challenges for different stakeholders:

The **challenge for users** is to be co-responsible for their health and social care, sharing decisions with professionals and able to debate which part of their present and future needs shall be publicly or privately catered for and publicly or privately financed.

The **challenge for academia and technological centres** is to identify the research paths that will enable a faster dissemination of the positive potential of technology to the whole population.

The **challenge for industry** is to design strategies, new roles and business models to increase their value proposal and reduce their costs, creating sufficient economy of scale, to cope with the needs of a more demanding and sophisticated Health and Social Care Market.

The **challenge for health and social care systems** is to be aware and open-minded in order to be able to successfully implement existing innovations that could contribute to their sustainability.

The **common challenge** for all of the above is to create a harmonious ecosystem that can foster a win-win situation for all actors.

Agreed principles for working together in future initiatives:

Accordingly, we, the signatories of this declaration, agree to work together with respect to the following principles:

- 1. We are committed to maintaining high level, sustainable, universal and affordable health and social care systems and thus, to adapt health interventions to the needs and priorities of the patient and the efficiency of the system.
- 2. We are committed to promoting an active role for citizens, encouraging their engagement

- in the management of their disease and in patient autonomy as well as involving citizens in decisions on health and social care.
- 3. We are committed to achieving continuity of care based on innovation (technological, commercial and organizational) through the promotion of multi-disciplinary care programmes, co-ordinated and integrated between different services, care levels and sectors, including the home as a centre for care.
- 4. Cross-border regional health innovation clusters and knowledge hubs that bring regional health systems, the business sector and universities together are one way of achieving the optimization of population health benefit from health care expenditure.
- 5. We are committed to working on the cross-border and publicly accountable generation of evidence on innovation in the health and social care systems to speed up the processes of implementation of these innovations and to increase the competitiveness of the health and social care industries.
- 6. The new products and services could be generated locally, but should be designed and implemented for a global market in order to achieve sufficient economies of scale.
- 7. We are committed to disinvesting, in an organized and planned way, in those previous products and technologies that have led to poor results for the population or for the systems.
- 8. Cooperation between different regional authorities is essential in order to achieve a broader market from the very beginning of the projects, but each should ensure their return on investment and the best allocation of their resources.
- 9. Cooperation between providers and buyers is essential in order to co-develop products and services that meet both the future and the present needs of the people and to test them in more than one setting so as to have widespread implementation in the health and social care systems.
- 10. We are committed to identifying health technology needs, and the specific entrepreneurs and partners that could design and develop these health technologies as part of a successful approach to innovation.

References and information:

BASQUE COUNTRY http://www.euskadi.net/r33-2220/es

INNOBASQUE

http://www.innobasque.com/home.aspx?tabid=475

BASQUE COUNTRY CHRONICITY STRATEGY http://cronicidad.blog.euskadi.net/

BASQUE COUNTRY DECLARATON

http://cronicidad.blog.euskadi.net/aal-summit-2012/the-basque-country-declaration/?lang=en

Pictures: The pictures below show Dr. Rafael Bengoa, Former Minister of Health and Consumer Affairs, Basque Government, Spain, and Prof. Olga Rivera, Former Deputy Minister of Quality, Health Research and Innovation, Basque Government, both formerly in policy lead of the reform of the health system in the Basque country. **Pictures courtesy - Basque Government.**





Scotland, UK

Response to Demographic Ageing and Financial Climate

Innovations in the Delivery of Health and Care Services Solutions in Scotland, UK

– enabled by ICT, eHealth & Technologies, tools and services

The text below is based on a meeting and discussion between Silas Olsson and:

John Turner,

Chief Executive Officer, NHS 24, Scottish National Health System, Scotland, UK

Text endorsed by Mr. Turner, September 30, 2013

Background - Challenge - Policy - Goal

Scotland has a population of 5.1 million and 20% of the population is 65 years of age or older.

There is a considerable change going on at present in Scotland in the way in which health, housing and social services are delivered. For many years the Scottish Government has prioritized "shifting the balance of care" to do more to prevent problems arising, and to address them early on, so that wherever possible health and care services are provided in people's own homes and local communities, rather than in care homes and hospitals. The Scottish Government has recently declared a '2020 Vision' for integrated health and social care in Scotland, which is 'to live longer, healthier lives at home, or in a homely setting'. The further ambition is to make Scotland a world leader in the delivery of high quality healthcare services, which provides an overarching context for partnership working with local governments and other key stakeholders. The Scottish Government has outlined three quality ambitions which aim to ensure that all care services are person centered, safe and effective. Further areas of policy and activities include:

- Reshaping Care for Older People;
- Dementia Strategy;
- Caring Together and Getting it Right for Young Carers;
- A Digital Ambition for Scotland; and
- Wider planning for an Ageing Population

The Scottish Government underlines that in the current financial and demographic climate, the need for bold transformational change has never been greater – and the role that telecare and telehealth can play in support of such change is significant and positive. For the two years 2011-2012 the Scottish Government created a fund "Telecare Development Program (TDP)" of 20 million pounds directed to local governments to implement technology enabled care redesign at scale to deliver sustainable, personalized health and care services to meet the needs of the people of Scotland – with the further aim to support as many people as possible to live at home for as long as they want to, in comfort and safety, with the best possible health and quality of life.

Here, the term "telecare" is used for remote or enhanced delivery of care services to people in their own home or in a community setting. The term "telehealth" is the provision of health services at a distance.

In this context the Scottish Centre for Telehealth (SCT) was created in 2006 and a strategic move was taken in 2010 when the SCT was incorporated into the NHS 24 organization. NHS 24 is a national health authority, which is part of the NHS in Scotland. NHS 24 has a national strategic framework for the development of SCT services, which is driving and delivering national telehealth solutions across four clinical areas – Stroke, Pediatrics, COPD and Mental Health. As NHS 24 also took responsibility for the national Telecare Development Program in 2011, the SCT has been expanded to be the SCT&T. Scotland therefore has a national strategic approach to the development of telehealth and telecare, and in the NHS 24 a national organization with a track record of delivery.

Ongoing developments and projects

NHS 24 – Scotland's Provider of National Telehealth Services – is an integral part of the National Health System in Scotland.

NHS 24 provides a wide range of telehealth services to the population of Scotland. The largest service is a telephony based out of hours triage and assessment service, which currently receives 1.5 million calls per year. NHS 24 also offers clinical services over the telephone in the areas of Mental Health support, Cognitive Behavioral Therapy, Flu support, and Alcohol Brief Interventions; and are providing telephone and web health services in relation to outpatient services and musculoskeletal services. NHS 24 provides a wide range of health and care information and advice using web services, and is currently piloting health services using webcam, web chat, social media, SMS texting, Digital TV and apps. NHS 24 is also exploring "Mobile Health" ("m-health") and sees a potential for a significant expansion of use of Smartphone technology for health purposes.

Industry involvement

NHS 24 works closely together with industry and other key stakeholders. Further, NHS 24 works as a bridge and supports collaboration between industry, practice and academia to encourage market opportunities around product and service development and to inform the research and innovation agenda about the need of the population.

Engage with industry is planned in the context of the development and procurement for innovative solutions. Technical standards are needed to be developed to ensure proper connect and interoperability as a range of sensors, devices and applications expand.

There is a strong encouragement from the Scottish Government to stimulate the industry to establish and stay in Scotland to contribute to the economic development in Scotland.

The Scottish government and NHS 24 work closely together with the UK funding agency Technology Strategy Board and their "DALLAS" program - "Delivering Assisted Living Lifestyles at Scale" - which aims to support industry to develop technology enabled innovative solutions, e.g. for wellbeing, top quality health and care services, independent living, including a preventative approach. The DALLAS budget is approx. 23 million pounds (including £5m from Scotland) over 4years, 2011-2015. The DALLAS program will establish three to five communities across the UK (one in Scotland) of 10.000 people each or more to show the use of the developed innovative solutions.

"Living it Up" – the Scottish part of the UK national DALLAS program

"Living it Up" (LiU) is a three year program (2012-2015) in Scotland, which is part of the overall Technology Strategy Board funded DALLAS (Delivering Assisted Living and Life Styles) program. LiU will deliver health, care and wellness service innovations. NHS 24 is

leading the program with a strong public and private sector consortium in place, and is undertaking the LiU program management to deliver the LiU (DALLAS) objectives.

Living it Up will enable people to stay happy, healthy and safe, caring for themselves and others via familiar technology. These technologies will include TV, mobile phones, computers and tablets. It will be influenced by users with our co-design process, allowing Living it Up to be created by the feedback from people in the local communities.

The Living it Up program in Scotland has successfully completed Phase One of its planned activities. This was the 'solution exploration' phase which ran from 1st June up until end Dec 2012, and involved over 1300 people within the 5 local communities (Highland, Forth Valley, Lothian, Moray and Western Isles) identifying what was most important to them in supporting their long term health, care and wellbeing. This first phase also explored the technical architecture necessary to run Living it Up, with a modular platform design being identified as the most suitable to support Scotland's need for multiple channels e.g. digital TV, phone, PC and tablet devices, and enabling the expansion beyond the current program timescales.

Phase Two – prototyping - runs up to December 2013, during which a working service model prototype will be constructed for Living it Up, which the communities will test out, design and develop. Currently test users are recruited from the 5 communities and there is significant enthusiasm to be involved, over 3,000 people so far.

This initial working model for Living it Up includes 4 key services;

- SHINE a place where an individual skills can be identified and then introduced to areas of interest and activities to keep them healthy and active e.g. volunteering opportunities.
- DISCOVER where information can be personalized along with products and services being showcased and rated by users, offering an innovative marketplace for SME's and other industry/business interests.
- **CONNECT** where the individual will initially use video conferencing to keep connected to their 'circles of care' including friends, family, community and care providers.
- **FLOURISH** which will include the more traditional Telehealth and Telecare features along with tools that keep you well.

It is anticipated that a launch of Living it Up prototype will take place in the Autumn 2013, where a prototype service can be demonstrated, along with engaged service users and organizations.

European perspectives

NHS 24 with the full support of the Scottish Government is looking to collaborate and work in partnerships, to exchange views and experiences, with regions and other health and care providers in Europe who are also intensively developing the delivery of health and care services.

NHS 24 welcomes the initiative from the European Commission with the "European Innovation Partnership on Active and Healthy Ageing (EIP-AHA)" and sees the initiative as a strategic move to bring together Europe to develop innovative solutions to respond to the demographic ageing. In this European Innovation Partnership, Scotland has recently been awarded the status as "Reference Site" for its work on Telecare, Risk prediction and its program on the Falls.

References and information:

http://www.nhs24.com/

 $\underline{\text{http://www.innovateuk.org/content/competition/dallas-delivering-assisted-living-lifestyles-atsc.ashx}$

Pictures: First below; NHS 24 health triage, assessment and support call centre in Glasgow. The centre receives 1.5 million calls per year. Second below; John Turner, CEO, NHS 24, Scottish National Health System.

Pictures courtesy NHS 24, Scottish National Health System.



South East Wales, UK

Response to Demographic Ageing, Quality and Cost

Innovations to support Independent Living and Wellness in South East Wales, UK

- enabled by ICT, eHealth & Technologies, tools and services

The text below is based on a meeting and discussion between Silas Olsson and:

Paul Flood.

Former Program Manager, Telecare & Telehealth Program, South East Wales Improvement Collaborative (SEWIC), Wales, UK

SEWIC is a collaboration between 10 local governments in Wales; Bridgend, Blaenau Gwent, Caerphilly, Cardiff, Merthyr, Monmouth, Newport, Rhondda Cynon Taf, Torfaen and Vale of Glamorgan.

Text endorsed by the current Program Manager Mr. David Williams, August 21, 2013

Background - Challenge - Policy - Goal

Wales has a population of 3 million, and the 10 local governments (SEWIC = Bridgend, Blaenau Gwent, Caerphilly, Cardiff, Merthyr, Monmouth, Newport, Rhondda Cynon Taf, Torfaen and Vale of Glamorgan) have a total of 1.7 million inhabitants and 254.000 or 15.3 % is 65 years of age or older.

The government of the Wales assessed the increasing cost for social services as not sustainable, due largely to changes in population characteristics due to demographic ageing; the cost of care; and the changing aspirations of the citizens of Wales. The local governments (and the NHS) responded with several partnership initiatives in the social sector. Initiatives include the development of "extra care housing" and the development of non-residential care for people with a learning disability.

Telecare and Telehealth are key parts of the SEWIC change program. The aim of the SEWIC Telecare & Telehealth Program is to collaborate and to coordinate services and initiatives, including commissioning; procurements and service delivery within the SEWIC authorities, for innovative ICT and technology enabled solutions in the health and social care sectors to contain costs and to deliver better services to the people.

On-going developments and projects – industry involvement

The SEWIC change program is currently running six projects focusing on supporting communities and prevents avoidable hospital admission, preventing or delaying admissions to residential care, and supporting wellbeing, healthy ageing and independence. The collaboration between the governments is seen as efficient and cost-effective and brings together knowledge and experience for better solutions. SEWIC will seek to work closely with industry providers in due course.

Taking a regional approach with SEWIC gives an opportunity to connect different workstreams relating to accommodation with care, high cost specialist placements and the use of assistive technology. This has brought together service commissioners in both social care and housing, care providers and housing associations to look at shared information and intelligence and a fresh commitment to collaboration in seeking new and innovative care solutions. This enables a better sharing of resources to give choice and support to service users.

A critical element is keeping care managers and potential service users of assistive technology informed as to equipment types and capability, showing the technology in a 'hands on' way is key as well as telling through workshops, presentations of communication leaflets. Demonstration facilities have a part to play here, and the SEWIC experience has

been that this is an important consideration in developing good awareness and appreciation of assistive technology.

European perspectives

As many regions and local governments across Europe are facing the same challenges in the health and social care sectors, characterized by demographic ageing and scarce resources, there should be a mechanism in Europe for sharing information and experience about initiatives on social innovation, experience and results. This would help support interesting initiatives, save time and save financial resources.

References and information:

http://www.wlga.gov.uk/english/

http://www.ssiacymru.org.uk/home.php?page_id=8339

Pictures: The pictures below show examples of assistive technologies (welfare technologies) for independent living of older and/or disabled persons, including video communication between staff and user – used in the SEWIC change program. **Pictures courtesy – SEWIC change program.**









Southern Denmark Region, Denmark

Response to Demographic Ageing and New Social Demands

Innovations in the Delivery of Health and Social Care, Products and Services, in the Region Southern Denmark

- enabled by ICT, eHealth & Technologies, tools and services

The text below is a summary based on a meeting and discussion between Silas Olsson and:

Henrik Kagenow,

Managing Director, Welfare Tech Region, Odense, Denmark

Mikael Tind.

Strategic Manager, Welfare Tech Region, Odense, Denmark

Text endorsed by Mr. Kagenow and Mr. Tind, August 05, 2013

Background - Challenge - Policy - Goal

The Region Southern Denmark has a population of 1.2 million and 17.7 % of the population is 65 years or older.

The Welfare Tech Region (WTR) was established in January 2010 (as a society/legal entity, and is currently staffed by 10 persons) by the Region Southern Denmark and the municipality of Odense, and backed by political support, with funding also from the Ministry for Science and Education in Denmark and the European Regional Development Fund. Currently the WTR has about 100 members, including municipalities, institutions, hospitals and industry. The WTR also has strong links to Ministry of Trade and Industry and Ministry of Foreign Affairs, and all supported developments are evaluated with an international market perspective.

The WTR acts as a national cluster and focuses on to support the development of innovation in the social care and healthcare sectors and increase in the area of care at home. A focus is on innovation to cope with challenges raised by demographic ageing trends. The overall aim with the WTR is to promote new business opportunities and technological products that meet the challenges of an ageing society, at simultaneously create new jobs - 650 new jobs over three years (2010-2013).

On-going developments and projects – industry involvement

Currently about 175 projects are up and running. Some ten new companies have been created. The current, and for the coming years, priorities are in the following areas:

- Innovations in the areas of health and hospital care, care processes and care delivery;
- Innovations in prevention, healthy ageing, and rehabilitation; and
- Innovations in social services, social innovations, and related care at home.

To support SMEs to grow, activities include linking them up with larger companies which are doing businesses in the same market sector.

The location of the WTR in the Science Park in Odense brings the WTR close together with a national centre for test and evaluation of tools and services in the social sector. This collaboration is branded as "Living Lab Denmark".

European perspectives

The market in a region, as well as in a small country, does not create the base for scaling up and "mass production". In this context the WTR is investigating possibilities for cooperation

with the Nordic Countries to create a "Nordic Home Market". This could also serve as a base for validating new products and services and to prepare companies for European and international markets, including the BRIC markets which are in line with priorities of the Danish Government.

On the European level there should be initiatives to establish large demonstration and visibility projects, and to harmonize the European markets and to get rid of structural barriers to European markets. The initiative of the European Commission with the "European Innovation Partnership on Active and Healthy Ageing" (EIP-AHA) is a move in the right direction. This initiative could, for example, include an arena for policymakers from different political sectors to interact for impacting on integrated policy topics.

Reference and information:

http://www.welfaretechregion.dk

Pictures: The pictures below show some of the innovation domains in which Welfare Tech Region works. **Picture courtesy - Welfare Tech Region, Odense, Denmark.**





Denmark

Response to Demographic Ageing and New Demands in Public Sector

Innovations in the Delivery of Health and Social care, and in Education and Training sectors in Denmark

- enabled by ICT, eHealth & Technologies, tools and services

The text below is a summary based on a meeting and discussion between Silas Olsson and:

Thomas Børner, Senior Adviser, Ministry of Finance, Danish Government, Copenhagen, Denmark

Text endorsed by Mr. Børner, August 22, 2013

Background - Challenge - Policy - Goal

Denmark has a population of 5.5 million and 17% of the population is 65 years of age or older.

The background challenges in establishing the foundation for "Public Welfare Technologies" (PWT) [Anvendt Borgenaer Teknologi], which was introduced in 2009 by the Danish Government, are the demographic ageing trends and at the same time expected loss of staff in the public service sector due to retirements over the next 6-7 years. The PWT foundation has a budget of € 400 million during the period 2009-2015. The PWT foundation is managed by the Danish Ministry of Finance.

The PWT program combines social and industrial goals, thereby recognizing the interrelationship of technology and process innovation when it comes to achieving the desired impact.

The PWT program aims to support and find innovative solutions for intelligent organization of the service delivery process and make the jobs in the public sector more attractive; and at the same time to stimulate industry to develop attractive products and services.

On-going developments and projects – industry involvement

In one of the thematic areas, which is focusing on "Care Technologies", the PWT foundation has supported projects (during 2009-2011) aiming, for instance, at testing/deploying age-friendly toilets, electronic bath/shower chairs, electronic tools supporting people with autism, alarm/tracking systems for people with dementia, medication reminders for people with mental disorders, electronic tools for self-activation of retarded adults, solutions for lifting/moving frail older people, electronic door locking systems and fall management systems.

For the second phase of the PWT program (i.e. 2012-2015), with a budget of €150 million, the following three domains will be covered:

- Healthcare
- Social care with a focus on the need of older persons
- Education and training

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For this period (2012-2015) a "top-down" approach will be taken by the program with the aim to ensure cooperation between ministries, regions and municipalities to establish fewer but larger integrated projects. Information and Communication Technologies (ICT) are a key enabler for innovation in the prioritized sectors.

Industry must be involved in all projects which are financially supported by the PWT foundation. The focus is to use existing technologies for new innovative solutions and show the benefits to the user. All projects must have a business-plan to start with, and have to deliver a business-case at the end of the project.

One of the largest new initiatives is a telemedicine project involving 2000 patients, 10 municipalities, two regions and four hospitals. This project is now incorporated in the Danish E-Health strategy.

Standardization and interoperability are regarded as crucial, not the least in the ICT sector, and work is on-going to make sure that open standards are used whenever possible.

European perspectives

The market for ICT-enabled solutions for the sectors in focus under the ABT program is limited in a small country such as Denmark. However, the European market is large, and potentially huge, but fragmented. For example, it is extremely difficult for an SME in Denmark to know about market circumstances, market entry barriers (e.g. legal procedures, regional and local rules, procurement rules, reimbursement schemes, etc.) in other countries.

In addition, the lack of established standards and interoperability agreements for ICT solutions in healthcare, social care, and in upcoming solutions addressing the needs of older persons, hampers market developments. Therefore, the European Commission could play a strategic role to identify and remove structural barriers to enable a true European market – for example, an "Internal European Market" for solutions in the context of demographic ageing.

Reference and information:

http://www.abtfonden.dk/

City of Oulu, Finland

Response to Demographic Ageing, Finance Challenges & Demands in Public Sector Innovations in the delivery of social care and integrated solutions with healthcare – enabled by ICT, eHealth & Technologies, tools and services

The text below is a summary based on a meeting and discussion between Silas Olsson and:

Anna Haverinen, Director of Elderly Care and Jaana Kokko, Project Manager, Social Welfare and Health Services, City of Oulu, Finland

Text endorsed by Mrs. Haverinen and Mrs. Kokko, October 29, 2013

Background - Challenge - Policy - Goal

City of Oulu has a population of 190.000 inhabitants and 13% of the population is 65 years of age or older. Demographic ageing in Oulu is inevitable and the greatest growth, soon to be a reality, is the group of seniors 85 years and older.

18% of the 65+ population, 30% of the 75+ and 57% of the 85+ population are enrolled in public support e.g. in home services, home care, day care, or sheltered houses for individuals suffering from severe physical or psychological disorders. The public budget cost of social care for the seniors is currently 100 million euro per year. This amount does not include the cost of the health care except health care provided at home for seniors. A separate additional public budget is provided for disabled persons.

Due to demographic ageing, in 10 years, the group of seniors 85+ will grow considerably and the budget cost of social support should expand accordingly, if nothing changes. Simply, if nothing changes, there will be no budget available in Oulu for keeping or increase the level of quality and quantity of social care for seniors.

However, there is a political agreement since about 10 years setting the goal that at least 92% of seniors 75+ in Oulu should be able to live at home. This political decision has initiated development work and projects to change the way social care is delivered, processes and collaboration between social care and health care i.e. integrated care solutions. The use of ICT (Information and Communication Technologies) enabled innovative solutions is crucial in this new era of social support to seniors, to the staff in social services, to the informal and family carers, and the collaboration between social services and healthcare.

On-going developments, projects and services

Developing work and projects, in collaboration with industry and research institutes, with the aim to support seniors to live at home for longer include the following:

- Safety alarm services, open 24/7, using cable, mobile, internet connections
- Mobile solutions in home care connected to client information system and work planning
- Digital keys and door lockers enabling access to staff by using a mobile phone
- GPS based alarm alarming if outside safe area
- Daily warm meal automat

- Pill dispenser with reminders connected to staff and/or relatives
- Welfare TV at home to connect with e.g. relatives, wellness programs, etc.

City of Oulu has developed a data warehouse (DW), which is a database used for reporting and data analysis. It is a central repository of data which is created by integrating data from one or more disparate sources.

There is further development work starting, e.g. with first priority, is about virtual visits (dayand night-time) by staff to seniors at home. Do not forget that many seniors are living in rural areas with long distance between their home and the site of social staff location.

Development work is also on-going, since many years, to further integrate healthcare (primary care and hospital care) with social care (e.g. home services) of the elderly. This work has been very much facilitated because the City of Oulu is the payer of both systems and therefore has a strong financial incentive to find efficient integrated solutions. The task right now is to interconnect the healthcare information system (e.g. medical records) with the social information system used in elderly care and services as largely as Finnish legislation allows.

Currently, a decision-making procedure is going on in parallel with cost-effectiveness studies, regarding implementation of ICT based solutions for seniors at home.

However, the elderly staff management team in Oulu has realized that attitude is a challenge in implementing technology based innovative solutions for supporting seniors! This attitude against ICT and/or technology based innovative solutions are broadly found, but interestingly not at all by seniors themselves, or by staff working or persons living close to the seniors. Initiatives should be taken to overcome those attitudes.

Industry involvement

Industry in Oulu, notably SMEs, is much interested in collaboration with the municipality for development work, and later to implement innovative solutions. Public procurement is used by the municipality and quality in services, not only the price, is an important part of the rating points of the procurement process. The new Oulu strategy 2020 states that by the year 2016 20% (cost wise) of the procurement will be directed toward innovative procurement methods (e.g. pre commercial procurement) enabling the procurement of innovative solutions.

To be able for the industry to structurally benefit from the municipality's work and ambition to find new innovative welfare and healthcare technology solutions "in the digital era" to support their older inhabitants, a "Technology Healthcare Centre" for testing products and services is established. The industry offers a one-stop-shop for testing new products and services in the real healthcare environment. This product testing service is planned to expand to home care.

Oulu Centre for Health and Technology is a regional research and business-driven Innovation Centre to develop next generation social and health care technologies, processes and services in close co-operation with industry.

A nearby activity is The Oulu Wellness Institute, a non-profit foundation established to develop business expertise in the wellness industry, advance national and international growth in the field, and activate cooperation between different actors.

OULLabs focuses on business for companies & communities by user driven innovation.

Business Oulu is supporting industry to go abroad and to support export.

Oulu has collaboration with Sendai City in Japan in the field of developing welfare technologies to meet the challenge of demographic ageing.

European perspectives

Recently (July 2013) Oulu became a partner in the European Innovation Partnership on Active and Healthy Ageing (EIP-AHA) by rewarding the status as "Reference Site". Here stakeholders from Europe can link up with Oulu and get advice and support in the field of testing products and services, develop welfare profiles of seniors to match the kind of support needed, and to further develop strategies for improving and support of self-care. The one-stop-shop center of testing products and services in real healthcare environment was very much appreciated in the Reference Site evaluation process.

Oulu is also involved in other European projects and an experience encountered is the greatest benefit to work together with colleagues from other European countries and to mutually learn from each other. However, beside the great benefit of mutual learning is the sometimes time consuming associated paperwork which practically has to be planned for. One of the ongoing projects is Silver (Supporting Independent LiVing for the Elderly through Robotics), where new technologies and solutions are sought by using a Pre-Commercial Procurement (PCP) process.

As mentioned in the beginning of this paper, Oulu has to change the way elderly care and home services are delivered to be able to finance quality services in the near future in the view of demographic ageing. Therefore, it is of utmost value to learn from other cities, municipalities and regions in Europe, and beyond, about their challenges and strategies & solutions that work. However, it is very difficult to find such information, also from our own country, and from Nordic countries and from other European countries. Today, most such information received is on personal contacts. Any European initiative as a platform for such information and interaction, including policies, strategies and results, is welcome.

References and information:

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http://www.owi.fi/index.php?id=238&lang_id=1

http://www.businessoulu.com/en/companies/business-sectors/life-science/ouluhealth.html

Pictures: The pictures below show some activities in the support and care of seniors in the City of Oulu, Finland. **Pictures courtesy – City of Oulu, Finland.**







Västerås Municipality, Sweden

Response to Demographic Ageing and New Ambitions in Homecare Services

Innovations to support independent living, autonomy and health at home and to give the staff new tools to develop work procedures and organization

- enabled by ICT, eHealth & Technologies, tools and service

The text below is based on meetings and discussions between Silas Olsson and:

Eva Sahlén, Director, Social Services Department, Boel Bolwig, Strategist, Social Services Department, Maria Gill, Project Manager, Welfare technologies, Mats Rundkvist, Project Manager, Welfare technologies, City of Västerås.

Text endorsed by E Sahlén, B Bolwig, M Gill and M Rundkvist, August 28, 2013.

Background - Challenge - Policy - Goal

Västerås municipality has a population of 140.000 and 19% of the population is 65 years of age or older. The cost, paid by (tax payers) Västerås municipality for the care of the elderly persons is currently about €115 million. About 2.000 seniors (65+) are currently receiving ordinary home care services.

The number of older seniors (80+), currently about 7.000, will increase by 50% in the Västerås municipality during 2014-2029, and at the same time the number of persons entering into the labour market will be reduced. And on top of this, due to retirements, Västerås faces large losses of staff in the Care of the Elderly Services in the coming years. Under these circumstances, it is a real challenge to be able to provide good quality services to seniors in need of such services.

A way to meet the demographic challenges, on the conditions of the seniors, is to introduce modern communication technologies (ICT enabled products and services) to support the staff in homecare services (social support in home settings) to develop new work procedures and organisation. In addition, the ICT enabled solutions will support the seniors to better empower their own situation, dignity and independence.

Examples of foreseen developments and changes in work procedures etc. based on experiences in Västerås municipality, include that video meetings in addition to physical meetings between staff and seniors will enhance the knowledge about the actual wellbeing and health status of the seniors and the competence of staff can be better matched to the individual need, travel time to seniors will be reduced, regular visits by nights to ensure wellbeing can be done remotely, and, new working tools allowing better work procedures and organizational developments will make the work more attractive and facilitate staff recruitments to this sector.

To make this happen, the politicians in Västerås municipality (the Committee for the Elderly) took the <u>decision in December 2009 to prepare for the introduction of "e-Homecare"</u> in the care of the Elderly services (home care – social support in home settings). After 2.5 years of

work with fact finding, analysis, projects including industry involvements and a broad range of consultations with e.g. citizens, elderly persons, staff working in the ordinary home care services, and politicians – in a model of partnership - the politicians in the municipality were ready for a decision.

The politicians in the Västerås municipality (the Committee for persons with impairment) took the <u>decision</u>, in <u>August 2012</u>, to introduce e-Homecare in the care services of the Elderly and Disabled persons. The decision, in brief, stated that e-Homecare will be offered to those persons, living at home, regardless of age, entitled to public financed home care, for example older persons and disabled persons. Four main e-Homecare services will be offered; encouragement to activities & social interactions, reminders, oversight daytime & nighttime, and response to alarms (enabled by message handling technologies via TV, SMS, MMS and email, videophone/TV, remote controlled mobile video, and cameras). Implementation of e-Homecare should be started in 2013.

Public Procurement to realize e-Homecare

To realize the four e-Homecare services, mentioned above, a procurement process is ongoing and about 75% of the procurement is currently finalized. The policy and steering requirements for the procurement include the following statements:

- Functional requirements for e-Homecare (not solution directed requirements)
- Moderate demand on a strong-financial-history to allow tendering from SME's and innovative start-ups
- Evidenced experience in the specific fields is a must
- Quality is judged by a panel of end-users (giving high weight in the ratings)
- Contract period of 2+1+1 years to allow for continuity as well for introducing new technologies.

The experience of applying the above requirements for the procurement has been very good. Lawyers from the municipality have been involved in the procurement process. No conflict experienced with the law on public procurement.

Not to lose time, about 1.300 staff in the Elderly services, regardless within private or public provider, has already received training on e-Homecare services, and Västerås municipality started to introduce e-Homecare in reality in homes of seniors by 1 May 2013.

Financial plan – expected results

The plan is to have about 50 e-Homecare users during 2013 and about 125 users during 2014. Information about e-Homecare services to seniors and to the general public in Västerås municipality will be intensified during autumn 2013. The users of e-Homecare (the seniors and persons with impairment) will pay the same fee to the municipality as for ordinary homecare. The cost for the technology is taken by the municipality and is balanced by efficiency gains (e.g. matched staff to the needs, reduce of travels).

The financial budget for e-Homecare is calculated for 300 users, by 2015, and shows a net savings of €0.6 to 2.3 million per year. The large span is representing "worst and best case" and is taking into account different scenarios.

Of interest is the use of "welfare broadband" or "social services broadband" which is a type of broadband designed for "machine-to-machine" connections and useful for e-Homecare, but not for Internet access. Welfare broadband ("stripped Internet") is often offered for a fraction of the price of Internet access. Welfare broadband will be used, where possible, for e-Homecare in Västerås municipality.

European perspectives

First of all Europe is Multilanguage and solutions for e-Homecare should be developed accordingly to meet the need and potential for cross-border interactions (amongst seniors and families) and an expanding market. Experience from Västerås shows a real need for "multi-lingual" solutions, and to avoid expensive add-on-developments, multi-lingual functions should be built in from the start.

Another observation is that the industry, with their knowledge and experience, should be much more involved – in close collaboration with the customer (municipality) - in taking initiative to test-implementing of e-Homecare solutions with a potential to change working procedures and organization.

It is almost impossible for a single municipality (290 only in Sweden) to know of initiatives, experiences and outcomes of other municipalities and providers in Europe and beyond involved in finding innovative solutions to the challenge of demographic ageing. This lack of overview and knowledge will delay the decision-making process in municipalities in implementing e-Homecare solutions. A European initiative on this subject is welcome.

Reference and information:

www.vasteras.se/stodomvardnad/sidor/ehemtjanstfran2013.aspx

Pictures: The first picture below shows a virtual visit by staff at a senior's home during nighttime, and the second picture below shows interaction between staff and seniors enabled by the mobile video robot controlled by staff at a distance.

Pictures courtesy - Västerås municipality.





Norway

National Innovation Agenda for Future Care and Care plan 2020

On June 11, 2013, the Norwegian Parliament Stortinget decided, with large cross-party majority, to adopt the Government's white paper "Future Care" for innovation and development of care services in Norwegian municipalities. The decision is based on a report "Innovation in Care" (NOU 2011:11).

Norway has 5.1 million inhabitants. The social care services in the Norwegian municipalities have operating expenses of approximately 90 billion NOK (approx. € 10.7 billion) per year (2012). Half of these costs relate to nursing home residents for about 40,000 people and the other half for home care for about 175,000 people (all age groups). More than one third of recipients of municipality delivered social care services were under 65 years.

Despite the magnitude, this sector has only to a lesser extent been subject of research and development work. At the same time, society faces major challenges in the care sector with a demographic trend with an increase in the proportion of elderly in the population, greater dependency needs, scarcity in health and social care professionals and informal (family) caregivers. This is briefly the background to the investigation "Innovation in Care" which finally suggested:

- Coordination and cooperation between public delivered services and family and civil society delivered services
- "Technoplan 2015" welfare technology based innovative care solutions
- Home solutions and home & community environment of the future
- National innovation programme for care solutions
- Care solutions as an industry and business sector

With welfare technology means primarily a technological aid that contributes to increased security, safety, social inclusion, mobility and physical and cultural activity and that strengthens the individual to self-manage their everyday lives despite illness, social, mental or physical impairment of function. Further, welfare technology can provide support for better availability, resource utilization and quality of care services and provide support for health and social care staff in their work and welfare technology can prevent the need for hospitalization or institutionalized care.

Based mainly on the report "Innovation in Care" the Government's white paper "Future Care", approved by the Parliament with a large cross-party majority, June 11 2013, included major movements, in summary:

- From healthcare to prevention and rehabilitation
- From traditional care institutions to other living and housing conditions
- New and better ways of cooperation with the civil society and better conditions for informal (family) careers

- Mobilize and use the resources of the society for social care in new ways
- Develop new forms of care enabled by new technology, new methods and new forms of work, as well as amendments to the legal framework
- Strengthen the municipalities' research, innovation and development work

Budget ("Care plan 2020") for the agreed work to be done ("Future Care"), will be decided on an annual basis and for 2013, 100 million NOK (approx. € 12 million) was approved. Also 100 million NOK is decided for 2014. In addition, for 2014, 50 million NOK is proposed for further competency enhancement in the social care sector as well as a major increase in investments for nursing homes and social care service homes.

References and information:

http://www.regjeringen.no/nb/dep/hod/dok/nouer/2011/nou-2011-11-2.html?id=697106

 $\frac{http://www.regjeringen.no/nb/dep/hod/dok/regpubl/stmeld/2012-2013/meld-st-29-20122013-3.html?id=735302$

<u>Japan</u>

Active Ageing and ICT enabled solutions – Japan Government Initiatives

Japan has one of the most rapidly ageing populations in the world. Currently Japan has 127 million inhabitants, of which 26% are 65+ years old. Projections for 2025 show that by then 30% of the population is 65+ years old. To meet the demographic ageing challenges, Japan Government has taken a number of initiatives.

The focus here is to give a brief of the Japan Government's initiatives based on Information and Communication Technologies (ICT) with the over-all mission of realizing the Ageing Society where whole generations of people can be active thanks to ICT enabled innovations. Such initiatives, innovations and tests include:

- Electronic Health Records (EHR) to safely and smoothly give related entities
 access to the information. The objective is to, build on the test, specify
 technological specifications and standardizations and to use the specified
 EHR across the country. (Nationwide deployment of EHR by March 2019).
- Telemedicine to interconnect e.g. remote cardiologist with local primary health physicians and elderly people provided and empowered with medical advices.
 A range of syndromes is covered in the initiative such as hypertension, diabetes, hyperlipidemia and impairment of liver functions.
- Telework both in the public and private sector with the aim to promote the social participation of elderly people through the diffusion of safe and easy-to-use telework system.
- Standardization work to better support elderly and disabled people to use communication devices, software and services.
- Robot technology to provide elderly and disabled persons with easy-to-use, well-customized services such as healthcare and nursing care.
- Smart TV or "connected TV" which enable highly personalized services corresponding to a variety of user needs including elderly and disabled persons.
- Smart Platinum Society for safe and active living enabled by ICT

The vision of the Japan Government in this context is to be able to:

- ✓ Live independently and enjoy a long and healthy life
 - Establishment of an ICT enabled prevention model
 - Expansion of Electronic Health Records
- ✓ Work with motivation in life and participate fully in society
 - Improvements in ICT literacy
 - Development of ICT enabled robots
- ✓ Create new industries and expand into the global market
 - Creation of a Smart Platinum Mobile Health Industry

- o Global expansion and international cooperation
- o Creating an equal to €180 billion worth market in Japan by 2020

The recent <u>Japan Government Declaration</u> (<u>June 14, 2013</u>) about the <u>Creation of the World's Most Advanced IT Nation</u>, gives amongst others, support to address the ageing population, including targets of the following initiatives:

- Roadmap for the initiative, Smart Platinum Society
- Longer living healthy society through improvement of health activities and provision of appropriate regional medical care/nursing care
- Deployment of Electronic Health Records nationwide by March 2019
- Improve health of local residents and workers by local government's or companies use of health diagnostic or medical prescription data

The issue on Demographic Ageing – the ageing society – is on the top priority of many national agendas, including Japan and EU. ICT enabled innovation addressing this challenges can create major opportunities for citizens and industry. To strengthen research and innovation cooperation between EU and Japan in the field of Demographic Ageing the "Japan-EU policy Forum on Silver ICT" was held in Brussels in November 2013. The Forum pursued, amongst other, cooperation in the fields of:

- ✓ Service robotics for independent living
- ✓ Open software platforms for service integration
- ✓ Large scale ICT pilots on innovative services for ageing well
- ✓ Large scale data sharing and analysis
- ✓ R&I roadmaps and strategic agendas

One platform for EU-Japan collaboration is the EU-Japan Centre for Industrial Cooperation, a non-profit organisation set up in 1987, by the European Commission and the Japanese Government. The aim is to promote all kinds of industrial, trade and investment cooperation between the EU and Japan. The EU-Japan Centre is also promoting R&I cooperation between EU and Japan and gives its support e.g. to SME cooperation, partner search etc. Offices are located in Tokyo and Brussels.

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http://www.eu-japan.eu/

PART 2 – European Level Initiatives

Policy and steering documents of the EU - the European Union

In the domain of policy for economic growth, innovation and research and the digital society, there are three main policy and steering documents on European Union (EU) level, which govern initiatives and processes on EU level and are directly relevant to the subject of this report. The three documents are;

I. "Europe 2020" – A European strategy for smart, sustainable and inclusive growth

- Europe 2020 is the main EU policy and steering strategy document and intended for the time frame 2010-2020. It focuses on growth, more jobs and better lives and should be seen in the light of the global impact of the economic and financial crisis. It is signed by José Manuel Barroso, chairperson of the European Commission in March 2010 and agreed by the EU Member States at June 2010 European Council. The three priorities of the strategy are the following;
- Smart growth is about developing an economy based on knowledge and innovation
- Sustainable growth is about promoting a more resource efficient, greener and more competitive economy
- Inclusive growth is about fostering a high-employment economy delivering social and territorial cohesion.
- The strategy proposes five EU targets for 2020 that will steer work and process in the following themes; employment, research & innovation, climate change & energy, education, and combatting poverty.
- All EU Member States have committed to achieving Europe 2020 targets and have translated them into national policies. To ensure European desired impact on growth, the European Commission has set up an economic policy coordination called "the European Semester".
- Cohesion policy and its Structural Funds are key delivery mechanisms to achieve the priorities of Smart, Sustainable and Inclusive growth in Member States and Regions.
- Seven "Flagship initiatives" are the main instruments to catalyze progress of the Europe 2020 strategy, committing both the EU and the Member States:
 - ✓ Innovation Union (Smart growth)
 - ✓ Youth on the Move (Smart growth)
 - ✓ A Digital Agenda for Europe (Smart growth)

- ✓ Resource efficient Europe (Sustainable growth)
- ✓ An Industrial Policy for the Globalization Era Sust. growth)
- ✓ An Agenda for new Skills and Jobs (Inclusive growth)
- ✓ European platform Against Poverty (Inclusive growth)

II. "Innovation Union" – A Flagship Initiative of "Europe 2020"

- Innovation Union policy is published by the EU (European Commission) and endorsed by the EU Member States during the autumn 2010, and is intended for the years 2010-2020.
- Innovation Union aims to improve conditions and access to finance for research and innovation, to ensure that innovative ideas can be turned into products and services that create growth and jobs.
- Innovation Union points out that; perhaps the biggest challenge for the EU and its Member States is to adopt a much more strategic approach to innovation. An approach whereby innovation is the overarching policy objective, where all policy instruments, measures and funding are designed to contribute to innovation, where the EU and national/regional policies are closely aligned mutually reinforcing, and last but not least, where the highest political level sets a strategic agenda, regularly monitors progress and tackle delays.
- Innovation Union contains 10 key initiatives;
 - ✓ European Innovation Partnerships (EIP) to mobilize stakeholders to tackle major societal challenges, pool expertise and resources and boost the competitiveness of EU industry. The first EIP focuses on the challenges of Demographic Ageing; "Active and Healthy Ageing". As Innovation Partnerships are a novel concept, this partnership is a pilot and a test of this new approach to EU research and innovation.
 - ✓ Innovation Union Scoreboard to measure progress
 - ✓ Improve Access to Finance to scale up EU schemes
 - ✓ Horizon 2020 the new Research and Innovation program 2014-2020 - designed to support "Europe 2020"
 - ✓ European Design Innovation Initiative to raise awareness of design as a driver of innovation in Europe
 - ✓ Social Innovation to support social innovators and to promote further social innovation through the European Social Fund
 - ✓ Public Procurement of innovative products and services
 - ✓ Standard-setting to enable interoperability
 - ✓ Europe's intellectual property regime to be modernized
 - ✓ **Structural Funds** to boost innovation

III. "A Digital Agenda for Europe" – A Flagship Initiative of "Europe 2020"

Digital Agenda aims to deliver sustainable economic and social

- benefits from a single market based on Information and Communication Technologies, ICT, and notably, fast and ultrafast internet and interoperable applications.
- Digital Agenda, to succeed, will require commitment and contribution at EU level, Member States, Regions, and other stakeholders.
- Digital Agenda points out seven main challenges to be tackled;
 - ✓ Fragmented digital markets
 - ✓ Lack of interoperability (standardization)
 - ✓ Rising cybercrime and risk of low trust in networks
 - ✓ Lack of investments in networks
 - ✓ Insufficient research and innovation efforts
 - ✓ Lack of digital literacy and skills
 - ✓ <u>Missed opportunities in addressing societal challenges</u>
- Regarding the last point "addressing societal challenges" the Digital Agenda points out that the deployment of ICT is a critical element for delivering policy objectives like e.g. supporting an ageing society and ensuring the inclusion of persons with disabilities. Further, eHealth can reduce medical costs and foster independent living, also in remote places and the EU needs to remove legal and organizational barriers, particularly those to pan-European interoperability.
- There is also an international dimension of Digital Agenda which aims to make Europe a powerhouse of smart, sustainable growth on the global stage – and many of the related policy issues in the seven pillars above, can only be successfully tackled on an international level.

EU Innovation Initiatives and Research and Innovation Funding Programmes that offer Support to Seize Opportunities and meet Challenges of Demographic Ageing and to Innovate Elderly Care

At the European Union (EU) level, there are several new and on-going funding programmes and initiatives that respond to the challenge of demographic ageing and related issues such as health and healthcare, social care, chronic health conditions and associated cost. These programmes cover the chain from basic research to innovation and to close-to-market initiatives. Notably, the time frame 2014-2020 offers new EU based opportunities with a new innovation focussed EU Framework Programme for research and innovation, the Horizon 2020, new European Regional Funds, new European Social Fund, new Health for Growth Programme, the ongoing European Innovation Partnerships on Acting and Healthy Ageing, and the 2014 upcoming new Knowledge and Innovation Community (KIC) on Innovation for Healthy Living and Active Ageing.

In addition, there are European wide R&I programmes under specific rules in collaboration between (some) EU Member States (and associated countries) and the European Commission. Such programmes include e.g. the Member State-lead "Joint Programme on Neurodegenerative Disease Research" (JPND) with a first focus on

Alzheimer's, the "More Years Better Lives" (MYBL) multidisciplinary research programme, and the close-to-market programme "Ambient Assisted Living Joint Programme (AALJP)".

These European initiatives and programmes 2014-2020 offer most probably a unique opportunity for European municipalities, regions, and countries (and e.g. stakeholders such as universities, institutes, organisations, industries and users) to thematically and strategically find and make use of possible synergies between the initiatives and programmes to address challenges and opportunities with Demographic Ageing including to develop innovative solutions for organisations, collaborations, delivery and support of Elderly Care. In this innovation context, the aspect of creating new jobs in industry, economic growth, trades, new markets and exports should be noted. Collaboration with partners from countries outside EU is possible (in most cases) and promoted, sometimes with a project budget support from the EU.

Here follows a list of EU initiatives and funding programmes which all, partly or fully, are addressing innovation, challenges and opportunities with Demographic Ageing and Elderly Care including Health, Healthcare, Social Care/Home Care and Rehabilitation. In the following a brief overview of each Programme will be given.

European Innovation Partnerships on Active and Healthy Ageing (EIP-AHA)
Horizon 2020 – Research and Innovation Programme
European Institute of Innovation and Technology (EIT)
Public Health Programme
Employment and Social Innovation Programme (EaSI)
Active and Assisted Living (AALJP II)
More Years, Better Lives (MYBL)
Joint Programme on Neurodegenerative Diseases (JPND)
Regional & Structural & Cohesion Funds (FRDF, FSF, CF)

Examples of EU programmes which will not be further dealt with in this report as they are not specifically focusing on Demographic Ageing and/or Elderly Care (although such applications are possible) are the following:

- ✓ ERC European Research Council http://erc.europa.eu/
- ✓ COSME Competitiveness of Enterprises and Small and Medium-sized Enterprises (SME)

http://ec.europa.eu/enterprise/initiatives/cosme/index_en.htm

✓ Eurostars

http://www.eurostars-eureka.eu/

European Innovation Partnerships on Active and Healthy Ageing (EIP-AHA)

a New and Unique European Initiative to Support Innovations and Cooperation in the Domain of Demographic Ageing

In response to the EU policy document "Innovation Europe", which is one of the Flagships of the key EU policy document "Europe 2020", the initiative "European Innovation Partnerships" with its first pilot on "Active and Healthy Ageing" was started at the end of 2010. It started with a stakeholder event (200+ participants) and a public consultation process which generated a big interest with 524 contributions. The reason to start with a pilot was because the "European Innovation Partnerships" is a novel concept which the European Commission wanted to test before launching a further set of Partnerships.

The high level aim of the initiative "European Innovation Partnership on Active and Healthy Ageing" (EIP-AHA) is to enable European citizens to live longer independently in good health by increasing the average number of healthy life years by two, by 2020. Further aim, in achieving this target, is to improve the sustainability and efficiency of European social and healthcare systems. And, to create an EU and global market for innovative products and services with new opportunities for EU business.

In April 2011, the European Commission established the EIP-AHA Steering Group (with an associated and supporting Sherpa Group) of 33 high profile individuals (on personal capacity) representing different sectors and stakeholders, such as, policy, public authorities, programmes, insurers, venture capital, users, academia and industry, and from the EU Council. The main task of the Steering Group was to work on and deliver a Strategic Implementation Plan (SIP) of the EIP-AHA.

The EIP-AHA governance structure within the Commission was unique at the time, with a joint responsibility of two Commissioners for Health and Consumer Policy and for the Digital Agenda for Europe (Mr. Dalli and Mrs. Kroes respectively), the two Directorate General (SANCO and INFSO/CONNECT), with a coordination in terms of process and governance by the Commissioner for Research and Innovation (Mrs. Geoghegan-Quinn).

In November 2011 the Strategic Implementation Plan was approved and delivered and serve as the basis for the implementation of the EIP-AHA initiative. The chief horizontal ambition of the SIP is "innovation and delivery" and three priority innovation areas were defined, 1) Prevention, screening and early diagnosis, 2) Care and cure, and 3) Active ageing and independent living.

In a joint statement, after the approval of the Strategic Implementation Plan in November 2011, the three above mentioned Commissioners said, "We want to make a real difference to the lives of older Europeans and this plan seeks to do exactly that. In these challenging times for Europe, we are delighted that so many parties are committed to joining forces. It is only through their innovative approaches that we can turn the challenge of demographic ageing into a great opportunity for people, carers and businesses. We will play our part, for example, through regulation and funding, and will talk to government leaders in partnership with stakeholders, to make this plan a reality."

The initial five vertical topics and one horizontal topic (the last in the below list), which comprise the current set of "Action Groups" of the EIP-AHA, are the following;

- Prescription and adherence to treatments
- Personal health management falls prevention
- Prevention of functional decline and frailty
- Integrated care for chronic diseases remote monitoring at regional level
- Interoperable independent living solutions
- Age friendly buildings, cities and environments

The European Partnership, the EIP-AHA is a unique initiative. It is a new way of cooperation in Europe. It welcomes all stakeholders to participate, from public and private sectors and with a direct collaboration with regions and municipalities, with an interest to work and contribute to the aim of the initiative and to commit their own resources to one/more of the above mentioned Action Groups. The EIP-AHA does not have its own budget for projects, but, as communicated by the European Commission, various existing EU funding programmes have been open, and will open for Calls for Proposals on the above topics. During 2012-2013, 6-7 Calls for Proposals have already been open with topics related to the EIP-AHA.

For 2014-2015 there are Calls for Proposals related to EIP-AHA published in e.g. the Horizon 2020 programme.

Two "EIP-AHA Call for Commitments" to the six above mentioned "Action Groups" have been launched. The first Call, open from 29 February to 31 May 2012 and the second Call, open from 20 December 2012 to 28 February 2013. These two Calls resulted in 572 (261+311) commitments (without budget contribution from the European Commission) comprising about 1.000 regions/municipalities and about 3.000 partners. All EU countries are now involved (also partners from Asia, Africa, North America, South America and Australia are involved). No doubt, the big response to the Calls, and having all EU countries (and more) involved, make this to a successful start of the EIP-AHA.

EIP-AHA "Marketplace", a platform to support innovative ideas, was launched during 2012. It serves as a forum to the rising visibility of the EIP-AHA and e.g. for networking amongst prospective partners and stakeholders, for evidence sharing and

exchange of ideas and looking for partners to form new initiatives. At the end of 2012 about 400 members had registered to the Marketplace which expanded to about 1.200 members at the end of 2013 and approx. 1.400 members at the end of May 2014.

To further strengthen EIP-AHA the Strategic Implementation Plan recommends to establish geographical located "Reference Sites" that are able to provide a comprehensive innovation-based approach to active and healthy ageing. An open Call from 29 February to 31 May 2012 invited relevant national, regional and local authorities and care institutions to submit expressions of intent to be a candidate "Reference Sites". The Call comprised six categories of innovation; medication adherence, fall prevention, frailty and malnutrition, integrated care, independent living and age-friendly environments.

The "Reference Site" Call resulted in 54 expressions of intent. Self and peer assessment and ratings within the group of candidates took place (the European Commission did not take part in this assessment and rating). Finally, the following list of 32 one-to-three star rated Reference Sites was selected and presented in an EIP-AHA Site Award Ceremony in Brussels 1 July 2013. Congratulations!

TABLE: EIP-AHA Reference Sites (Regions/Cities)

Country	Reference Site	Profile (short, not fully, description)	Star/s
CZ	Univ Hosp Olomouc	Telemonitoring of patients with heart failure	1
DK	Southern Denmark	Health and Social care collaborations	3
FL	City of Oulu	Wellness technology	2
FR	lle de France	Techn. enable. support at home after hospitalisat.	2
FR	Languedoc-Rouss.	Interoperable integrated care pathways	2
FR	Pays de la Loire	Living Lab for Autonomy and longevity	1
FR	Lower-Rhine	Public policy on active and independent ageing	1
DE	Saxon state	Housing and living at age	2
IE	Cork & Louth	Programme to prevent/delay frailty	3
IT	Liguria	Memory training and physical activity	1
IT	Campania	Integrated model to prevent/reduce frailty	2
IT	Emilia-Romagna	Healthcare on-line and electronic health rec.	2
IT	FriuliVeneziaGiulia	Services for visually impaired people at all ages	1
IT	Piemonte	Nurses advanced learning programme	1
PT	Coimbra	Ecosystem to manage cognitive ageing	2

ES	Andalusia	Strategy on active ageing	3
ES	Basque	Strategy on chronic conditions	3
ES	Catalunya	InnoHealthHub for age related diseases	3
ES	Galicia	Integrated management of chronic patients	2
ES	Madrid	Integrated care clinic for falls and fractures	3
ES	Valencia-La Fe	Integrated chronic disease management	3
SE	Skåne	Cooperation home-primary-hospital elderly care	2
NL	Southern Holland	Network for integrated falls prevention	2
NL	Nijmegen	Network for active and healthy ageing 1	
NL	North Netherlands	Active living model and healthy ageing network	3
NL	Noord-Brabant	Care site online platform	3
NL	Twente	Social innovation and techn. for healthy ageing	2
UK	Wales	Strategy for older people	3
UK	Yorkshire-Humber	Regional telehealth hub	3
UK	Liverpool	More Independent programme	2
UK	Scotland	National telecare development programme	3
UK	Northern Ireland	Integrated Medicines management	3

Currently the "real" work of the Reference Sites is progressing including e.g. sharing knowledge and experiences, "twinning" with other regions, including new regions to the EIP-AHA, as well as forming a Reference Site Collaborative Network.

For the time being, no further EIP-AHA Action Groups are in plan besides the six existing Groups. However, new Commissioner/s, after 2014 elections, taking office late 2014 or beginning of 2015 may take the lead and initiate a process to expand the existing set of Actions Groups with new Groups and topics. For the participants in EIP-AHA Action Groups, and in Reference Sites, to optimise impact of the undertakings, it is advisable to look for synergies with other EU programmes that support innovations and/or policy development in the domain of Demographic Ageing, including the new Regional Funds 2014-2020.

The successful plan and start-up of the pilot initiative on EIP-AHA entailed green light to the European Commission to launch new European Innovation Partnerships. The four new EIPs are about:

- Water
- Agricultural Productivity & Sustainability
- Raw Materials

Smart Cities & Communities

The new EIPs are currently in progress and in different stages of development. As for the EIP-AHA the European Commission will open up existing funding programmes on topics related to the new EIPs.

References and information:

http://ec.europa.eu/research/innovation-union/index_en.cfm?section=active-healthy-ageing&pg=home

https://webgate.ec.europa.eu/eipaha

http://ec.europa.eu/research/innovation-union/index_en.cfm?pg=eip

http://ec.europa.eu/research/innovation-union/index_en.cfm?section=active-healthy-ageing&pg=calls

Horizon 2020

- the New EU Research and Innovation Programme for 2014-2020

Horizon 2020, formally launched 1 January 2014, is the new EU Research and Innovation Programme over the seven years 2014-2020 with a budget of nearly €80 billion (current prices) and is the largest EU R&I Programme ever and one of the largest publicly funded worldwide. This budget is nearly 30% higher compared with its predecessor the Seventh Framework Programme for Research and Technological Development (FP7). Horizon 2020 is designed to implement the strategic approach of the "Innovation Union" which in turn is one of the Flagships of the key EU policy, the "Europe 2020" (smart, sustainable and inclusive growth).

An overall policy of Horizon 2020 is to drive economic growth and create jobs. This can be seen in the light of the financial and economic crisis in Europe and beyond, lasting over several years. The general objective of the Horizon 2020 is to generate excellent science, industrial leadership and tackling societal challenges. International cooperation (beyond EU) will be further promoted in Horizon 2020 and all priorities and specific objectives should include an international dimension.

The biggest change compared with previous EU R&D Framework Program (FP7) is that Horizon 2020 coupling together research and innovation by support all stages in the research and innovation chain, including non-technological and social innovation and activities that are closer to the market. Horizon 2020 is more themes oriented compared with FP7, e.g. the "theme Health" is grouped together, regardless of the kind of technologies that can be used in projects. Another change is "simplification" ("slash red tape") e.g. a single set of participation rules such as eligibility, evaluation, Intellectual Property Rights etc. and some new financial efficiency rules in project management and reporting. Time to Grant Agreement (from Call closure) is reduced to maximum eight months.

Horizon 2020 focuses on the following main priorities ("specific objectives"):

4. Generating Excellent Science – seven year budget €24.4 billion

- a. Frontier research (ERC) [€13.1 billion]
- b. Future and Emerging Technologies (FET) [€2.7 billion]
- c. Skills and career development (MSCA) [€6.1 billion]
- d. Research infrastructure [€2.5 billion]

5. Fostering Industrial Leadership (LEIT) – seven year budget €17.0 billion

- a. Leadership in enabling and industrial technologies [€ 13.6 billion]
 - i. Information and Communication Technologies (ICT)
 - ii. Nanotech, materials, manufacturing, processing
 - iii. Biotechnology
 - iv. Space
- b. Access to risk finance [€2.8 billion]
- c. Innovations in SME [€ 0.6 billion]

6. Tackling Societal Challenges – seven year budget 29.7 billion

- a. Health, demographic change and wellbeing [€7.5 billion]
- b. Food security, sustainable agriculture and forestry, marine, maritime and inland water research, and the bio-based economy [€3.9 billion]
- c. Secure, clean and efficient energy [€ 5.9 billion]
- d. Smart, green and integrated transport [€6.3 billion]
- e. Climate action, environment, resource efficiency and raw materials [€ 3.1 billion]
- f. Inclusive, innovative and reflective societies [€ 1.3 billion]
- g. Secure and innovative societies [€1.7 billion]

Horizon 2020 budget also includes funding of the specific objectives "Spreading excellence and widening participation", "Science with and for society", and research activities under the Euroatom Treaty and research activities of the European Commission's in-house science service the "Joint Research Centre" (JRC), and the "European Institute of Innovation and Technology" (EIT), together approx. €7.5 bn.

Horizon 2020, although formally launched 1 January 2014, opened up its first Call for proposals 11 December 2013 together with making public the associated Work Programmes ("WPs") which includes Call text, specific budgets etc. for 2014 and 2015. The total Horizon 2020 budget for 2014 and 2015 is €15 billion (€7.8 and 7.2 billion respectively).

Funding from Horizon 2020 is allocated on the basis of competitive Calls and managed centrally by the European Commission and/or its executive agencies. There are no pre-allocated country quotas as are the case for e.g. European Structural and Investment Funds (ESIF).

In the following the focus is to show selected parts of the Horizon 2020, WP 2014 and 2015 Calls, which are related to the subject of this report, i.e. innovation, health, healthcare & elderly care, demographic ageing and Information and Communication Technologies (ICT). The main Horizon 2020 challenge in this respect is **Health**, **demographic change and wellbeing** under **Tackling Societal Challenges**. However, please note that there are several other themes and topics which not

	CCES	

specifically mention "health, healthcare, elderly care etc." but are open for such related applications, e.g. the ICT topic under the Industrial Leadership (LEIT).

Responding to the challenge "Health, demographic change and wellbeing", research and innovation under the Horizon 2020 is an investment in better health for all. It aims to keep older people active and independent for longer and supports the development of new, safer and more effective interventions. Research and innovation under the Horizon 2020 also aim to contribute to the sustainability of health and care systems.

"Health, demographic change and wellbeing" in Horizon 2020 during 2014-2015 has 50 Call topics including coordination actions with a total budget of approx. € 1200 million. Although all these topics are directly or indirectly relevant to the subject of this report, the following shows a selection of 24 Call topics with a total budget of approx. €550 million, which, in the view of the author of this report, are more direct (and/or on shorter term) connected to the subject of this report, and hopefully serve as a quick overview to the reader of this report. However, please note that all Call topics during 2014-2015 in the "Health, demographic change and wellbeing" challenge can be reached by this link (to the WP):

http://ec.europa.eu/research/participants/data/ref/h2020/wp/2014 2015/main/h2020-wp1415-health_en.pdf

<u>Selected Call topics</u>, as mentioned above, extracted from the "<u>Health, demographic change and wellbeing</u>" challenge during 2014-2015 are shown below. For 2014, the first part of Calls for Proposals was closed 15 April and the remaining parts will close, depending on topics, at later dates in 2014. For 2015 Call text, etc. are indicative. "PHC" stands for Personalising Health and Care. "HCO" stands for Health Coordination activities. For information about specific budget for the topics, type of action, closing dates, evaluation criteria and other Call specific information, visit the WP link as given above and the topic links in the following selected Call topics.

Understanding health, ageing and disease:

- □ PHC-01-2014: Understanding health, ageing and disease: determinants, risk factors and pathways
- □ PHC-03-2015: Understanding common mechanisms of diseases and their relevance in comorbidities

Effective health promotion, disease prevention, preparedness and screening:

- PHC-05-2014: Health promotion and disease prevention: translating 'omics' into stratified approaches
- □ PHC-04-2015: Health promotion and disease prevention: improved inter-sector co-operation for environment and health based interventions

Improving diagnosis:

□ PHC-10-2014: Development of new diagnostic tools and technologies: in vitro devices, assays and platforms

Improving treatments and technologies:

- ☐ PHC-13-2014: New therapies for chronic non-communicable diseases
- □ PHC-17-2014: Comparing the effectiveness of existing healthcare interventions in the elderly

HealthAccess	

Advancing active and healthy ageing:

- PHC-19-2014: Advancing active and healthy ageing with ICT: service robotics within assisted living environments
- PHC-20-2014: Advancing active and healthy ageing with ICT: ICT solutions for independent living with cognitive impairment
- □ PHC-21-2015: Advancing active and healthy ageing with ICT: Early risk detection and intervention
- ☐ PHC-22-2015: Promoting mental wellbeing in the ageing population

Integrated, sustainable, citizen-centered care:

- ☐ PHC-23-2014: Developing and comparing new models for safe and efficient, prevention oriented health and care systems
- □ PHC-26-2014: Self management of health and disease: citizen engagement and Health
- ☐ PHC-25-2015: Advanced ICT systems and services for integrated care
- PHC-27-2015: Self-management of health and disease and patient empowerment supported by ICT
- PHC-28-2015: Self management of health and disease and decision support systems based on predictive computer modelling used by the patient him or herself
- □ PHC-29-2015: Public procurement of innovative eHealth services

Improving health information, data exploitation, evidences for policies and regulation:

- □ PHC-31-2014: Foresight for health policy development and regulation
- ☐ PHC-34-2014: eHealth interoperability
- PHC-30-2015: Digital representation of health data to improve disease diagnosis and treatment

Coordination activities:

- ☐ HCO-01-2014: Support for the European Innovation Partnership on Active and Healthy Ageing
- ☐ HCO-02-2014: Joint programming: Co-ordination action for the joint programming initiative (JPI) 'more years better lives the challenges and opportunities of demographic change'
- ☐ HCO-05-2014: Global Alliance for Chronic Diseases: prevention and treatment of type 2 diabetes
- ☐ HCO-06-2015: Global Alliance for Chronic Diseases: 2015 priority

References and information:

http://ec.europa.eu/programmes/horizon2020/

http://ec.europa.eu/research/participants/data/ref/h2020/legal_basis/sp/h2020-sp_en.pdf

http://ec.europa.eu/budget/mff/programmes/index_en.cfm#horizon2020

http://ec.europa.eu/research/participants/data/ref/h2020/wp/2014_2015/main/h2020-wp1415-health_en.pdf

 $\underline{\text{http://ec.europa.eu/research/iscp/pdf/com_2012_497_communication_from_commission_to_inst_en.p}\\ \underline{\text{df}}$

European Institute of Innovation and Technology (EIT)

European Institute of Innovation and Technology (EIT) aims to foster the integration of higher education, research and innovation through its Knowledge and Innovation Communities (KICs) thereby creating new environments conducive to innovation, supporting a new generation of entrepreneurial people and stimulating the creation of innovative spin-offs and startups. In addition the EIT and its KICs will seek synergies and interaction across the priorities of Horizon 2020 and in particular to the specific objectives of the "Societal Challenges" and to "Leadership in Enabling and Industrial Technologies" (LEIT).

On the EU policy map, the EIT will fully support the key EU policy "Europe 2020" and specifically its Flagship initiatives "Innovation Union" and "Youth on the Move". EIT will also be linked to Regional Policy through the KICs and theirs co-location centres to ensure a better connection between higher education, the labour market, and regional innovation and growth in the context of regional and national smart specialization strategies. Hence, this will contribute to the EU's cohesion policy.

The EIT KICs bring together partners from industry, including SMEs, higher education, research and technology institutes and allow partners from across the EU and beyond for cross-border configurations and to open up access to new business opportunities. Each KIC is driven by a CEO - to operate in line with business logic, result-oriented approach and business-like decisions. A KIC is set up for seven years and may be extended in time. .

Currently, since 2010, there are three running EIT-KICs:

- Climate-KIC: climate change mitigation and adaptation
- EIT ICT Labs: information and Communication Technologies
- KIC InnoEnergy: sustainable energy.

EIT is launching Calls for two new KICs - during 2014:

- Innovation for Healthy Living and Active Ageing
- Raw Materials: sustainable exploration, extraction, processing, recycling and substitution

The Call for the above two new KIC applications will close 10 September 2014 and the announcement of the winners is planned for December 2014.

Further on, the EIT plans by 2016 to launch two additional KICs in "food4future" and "Added Value Manufacturing". In 2018, according to plans, a new KIC will be launched on "Urban Mobility".

Of interest in this context is to note the new EIT KIC "Innovation for Healthy Living and Active Ageing" and its tight complementary and supporting strategy to other EU initiatives and programmes (and EU / Member States joint programmes) like e.g. Horizon 2020, the European Innovation Partnership on Active and Healthy Ageing (EIP-AHA), the Active and Assisted Living (AAL) joint programme, the Health for Growth programme and the Regional Funds. This opens up for possibilities to draw

strategic synergies by stakeholders like municipalities, regions, universities/institutes, industry, health and user associations, funding agencies etc.

EIT is a body of the European Union with the headquarters based in Budapest, Hungary. It was founded in 2008 and became operational in 2010 and has about 50 staff members. EIT budget for 2014-2020 is € 2.7 billion.

References and information:

http://eit.europa.eu/about-us/

http://eit.europa.eu/kics/2014-call-for-kics/

http://eit.europa.eu/fileadmin/Content/Downloads/PDF/2014_KIC_Call/2014_KIC_Call Framework of Guidance.pdf

http://eit.europa.eu/fileadmin/Content/Downloads/PDF/2014_KIC_Call/EIT_Financial_Regulation.pdf

http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:347:0892:0923:EN:PDF

http://eit.europa.eu/about-us/regulation/

Health Programme 2014-2020 ("Health for Growth Programme")

The EU community action programme in the field of Health (Public Health), the "Health Programme", first launched in 2003 and lasted until 2007 with a budget of € 312 million, was based on previous experience and efforts in areas of e.g. health prevention, promotion and monitoring, cancer, communicable diseases and drug prevention. The second Health Programme 2008-2013 had a budget of € 321 million with three overarching objectives;

- improve citizens' health security, by e.g. developing the capacity of the EU
 community to respond to communicable and non-communicable diseases and
 promoting actions related to patient safety through high quality and safe
 healthcare, scientific advice and risk assessment, safety and quality of organs,
 substances of human origin and blood
- promote health and reduce health inequalities, increasing healthy life years and promoting healthy ageing
- generate and disseminate health information and knowledge, exchanging knowledge and best practice on health issues

The third Health Programme, 2014-2020 ("Health for Growth Programme") have a budget of € 449 million and focusing on reducing health inequalities and encouraging innovation in the sector - with the overarching objective to support the key EU policy document, "Europe 2020", for an Intelligent, Sustainable and Inclusive Growth, by;

- Promoting health
- Encouraging innovations in health
- Increasing the sustainability of health systems
- Protecting citizens from serious cross-border health threats
- Complement, support and add value to the policies of Member States to improve the health of EU citizens and reduce health inequalities

Part of the new Health Programme will contribute to innovative, efficient and sustainable health systems and will support measures e.g. on the following topics;

- Up-take of health innovation and eHealth solutions
- Health in an ageing society
- European Innovation Partnership on Active and Healthy Ageing
- Health workforce forecasting and planning
- A mechanism for pooled expertise and good practice assisting Member States in their health system reforms
- Health Technology Assessment
- Legislations

The Health Programme 2014-2020 was formally approved by European Parliament and EU Council in March 2014. The first Call for Joint Actions and Projects etc. is planned to open during June/July 2014.

References and information:

http://ec.europa.eu/health/programme/policy/2008-2013/index_en.htm
http://ec.europa.eu/health/programme/policy/2014-2020/state_of_play_en.htm

Employment and Social Innovation Programme "EaSI" 2014-2020

The new "Employment and Social Innovation Programme" ("EaSI") 2014-2020, has a budget of €920 million to support innovative social policies, promote labour mobility, facilitate access to microcredits and encourage social entrepreneurship.

EaSI is managed directly by the European Commission and integrates and extends three existing programmes, Programme for Employment and Social Solidarity ("Progress"), European Network of Public Employment Services ("EURES") and the European Progress Microfinance Facility ("Progress Microfinance").

EaSI is formally adopted and is launched 1 January 2014. The first Work Programme, with Calls for project proposals, is published and currently, May 2014, first Calls for proposals are open. The integrated approach of EaSI and its focus on innovative projects is to support the key EU policy "Europe 2020" (smart, sustainable and inclusive growth). The three mentioned components of EaSI will receive the following budgets;

- Progress; around €550 million, to modernization of employment and social
 policies e.g. to analysis, learning and exchanges of practices in the field of
 employment and social policies, and to help Member States to design and
 implement policy reforms to achieve the Europe 2020 goals. A specific budget
 is devoted to the areas of youth employment or inclusion.
- EURES; around € 160 million, for job mobility e.g. to the EURES Network for information and advice to job seekers wishing to work in another EU country, and to core activities at EU level while national activities can receive funding from the European Social Fund (ESF).
- **Progress Microfinance**; around €200 million, e.g. to support microcredit providers and institutions to develop the social investment market and access to finance for social enterprises and social entrepreneurship.

Of interest in this context are two recent Calls for project proposals during the 2013 (in the previous Health Programme) in the area of Active ageing and Social Protection Systems;

- ✓ Support to the development of comprehensive Active Ageing Strategies
- ✓ Support for the design of reform strategies for more cost-effective Social Protection Systems

These two Calls closed in September and October 2013 respectively. The winners of the mentioned two calls will be published on the below link.

References and information:

http://ec.europa.eu/social/main.jsp?langld=en&catld=1081

http://ec.europa.eu/budget/fts/index_en.htm

Ambient Assisted Living Joint Programme (AALJP) – renewed for 2014-2020

"Ambient Assisted Living Joint Program" (AALJP) was established 2008, initially as a six-year-programme (2008-2013) where 23 EU Member States and Associated Countries, together and with financial support of the European Commission, cofinanced projects with the aim to develop innovative solutions for elderly persons, enabled by Information and Communication Technologies (ICT). A second objective of this program is to support business and industry to develop competitive products.

The budget (public project funding) of the programme has been in the order of €50-60 million per year. The AALJP is driven by its member countries with its secretariat located in Brussels, Belgium. The program is established under the "EU Treaty Article 185".

The AALJP programme 2008-2013 has funded about 150 projects. Six calls for proposals have been launched with the following topics – "ICT based solutions for";

- √ 2008; Prevention and management of chronic conditions of elderly people
- √ 2009; Advancement of social interaction of elderly people
- √ 2010; Advancement of older person's independence and participation in the "self-serve society"
- ✓ 2011; Advancement of older person's mobility
- √ 2012; (Self) management of daily life activities of older adults at home
- ✓ 2013; Supporting Occupation in Life of Older Adults

The initial AALJP programme was established for six years, 2008-2013. Preparations have been done to renew, relined and rename the programme for a period of seven years 2014-2020 – the "Active and Assisted Living Joint Programme" – "AAL 2".

The final decision and approval about "AAL 2" was taken by the European Parliament and EU Council in April 2014.

The public part of the seven-year-budget is €350 million, 50% from the participating member countries and 50% from the European Commission – from the budget for the Horizon 2020 innovation and research programme.

The new "AAL 2" will e.g. support the implementation of the European Innovation Partnership on Active and Healthy Ageing by aligning to its scope covering ICT based innovation: from independent living and integrated care (including telehealth and telecare) to fall prevention, medication adherence and age-friendly environments and communities.

The first Call for proposals under the "AAL 2" is launched; "Care for the Future", with a deadline for proposals by 26 June 2014.

Reference and information:

http://www.aal-europe.eu/

More Years, Better Lives (MYBL) – the Potential and Challenges of Demographic Change

The "More Years, Better Lives" (MYBL) is an EU Member-State driven research programme in collaboration with the European Commission, a "Joint Programming Initiatives", which seeks to enhance coordination and collaboration between European and national research programmes related to demographic change.

MYBL is a collaboration between 14 EU Member States, Canada and the European Commission, which was established in 2011, and currently with its secretariat in Germany.

The program will focus on multi-disciplinary research. The Programme has initially initiated the following research areas;

- ✓ Health & Performance
- ✓ Social Systems & Welfare
- ✓ Work & Productivity
- ✓ Education & Learning
- ✓ Housing, Urban & Rural Development & Mobility

The project "J-AGE" is currently running which is a coordination action for the early implementation of the Joint Programming Initiative (JPI) More Years Better Lives (MYBL) from 2012-09-01 to 2015-02-28 (an FP7 financed activity). Included in the project is the work on the "Strategic Research Agenda", mapping of national programmes and initiatives and a foresight activity.

The "Strategic Research Agenda" was published in April 2014 and define the following four research domains; 1) Quality of Life and Health, 2) Economic and Social Production, 3) Governance and Institutions, and 4) Sustainability of Welfare in the EU - and the Agenda includes the following 11 research priorities and topics:

- Quality of Life, wellbeing and health
- Learning for later life
- Social and economic production
- Participation
- Ageing and place
- A new labour market
- Integrating policy
- Inclusion and equity
- Welfare models
- Technology for living
- Research infrastructure

Ultimately the project and the JPI seek to strengthen the base of multi-disciplinary and holistic ageing research and to provide scientific evidence for policy responses to demographic change.

The first MYBL Call for project proposals is expected during 2015.

References and information:

http://www.jp-demographic.eu/

http://cordis.europa.eu/projects/rcn/105094 en.html

Joint Programme on Neurodegenerative Diseases (JPND)

The "Joint Programme on Neurodegenerative Diseases" (JPND) is an EU Member-State driven research programme. JPND is a collaboration between 26 Member States (and one third country) and the European Commission, and currently with its secretariat in Germany.

JPND Research in Alzheimer's is a first priority area with reasons that Europe has a rapidly ageing population. Alzheimer's and Parkinson's are debilitating and largely untreatable conditions that are strongly linked with age. Dementias are responsible for the greatest burden of disease, with Alzheimer's disease and related disorders affecting **over 7 million people in Europe**, and this figure is expected to double every 20 years as the population ages. Further, according to JPND, the cost to care people with dementia across Europe is approximately €130 bn. per year.

JPND has launched annual calls for proposals since 2011.

Reference and information:

http://www.neurodegenerationresearch.eu/

EU Regional, Structural and Cohesion Funds 2014-2020

The total EU budget ("ceilings") for the years 2014-2020 is € 1.083 billion (current prices), and out of this, € 352 billion (incl. Youth Employment Initiative), roughly a third of the EU budget, is allocated for the Cohesion Policy - to the EU Member States, their Regions and Cities. The key priorities include innovation, tackling unemployment, supports for SMEs and the low carbon economy in all sectors. The overall aim with these Funds is to implement the key EU Policy Europe 2020 - smart, sustainable and inclusive growth – and the three Funds are (the EAFRD/Agriculture and EMFF/Marine Funds are not covered in this report) the following:

- **European Regional Development Fund (ERDF)**, including e.g.
 - European Territorial Cooperation (ETC) [former the INTERREG programmes] will include cross-border ("A" strand), transnational ("B" strand) and interregional ("C" strand – "INTERREG EUROPE") cooperation.

ERDF priorities "Investing in Growth" include:

- ✓ Innovation and Research (smart specialization strategies a placebased strategy for opportunities in the local economy)
- ✓ Information and Communication Technologies (ICT The Digital Agenda)
- ✓ Competitiveness of SMEs
- ✓ Low-carbon Economy in all sectors

European Social Fund (ESF)

ESF priorities "Investing in People" include:

- ✓ Employment and Mobility
- ✓ Better Education training lifelong learning
- ✓ Social Inclusion combatting poverty
- ✓ Efficient Public Administration

<u>BUDGET</u> 2014-2020: ERDF+ESF= €284bn (and thereof ERDF maximum share €203.7bn and ESF minimum share €80.3bn)

- Cohesion Fund (CF), priorities include:
 - ✓ Environment renewable energy energy efficiency
 - ✓ Trans-European Networks transport infrastructure

BUDGET 2014-2020: CF €63.4bn

Based on the lessons learnt during the previous programming period (2007-2013), the European Commission prepared end of 2012 for each Member State a "position paper" with the Commission's views on the main challenges and funding priorities. This also initiated the intensive work to develop a Partnership Agreement (PA) between Member States and the European Commission and Operational Programmes (OP) for the period 2014-2020.

Member States and Regions have to make clear up front what objectives they intend to achieve with the available resources from the Funds 2014-2020. This process and negotiation, currently ongoing, between the Member States and Regions (and stakeholders) and the European Commission will lead to two jointly agreed key documents; the "Partnership Agreement" (PA) per country and thereafter, the "Operational Programmes" (OP) [and for some regions "Action Programmes"], which will be the practically leading document to implement the Funds.

The general rule is that the PA should be adopted by August 2014 at the latest and the OP should be adopted by January 2015 at the latest. The actual date of adoption will vary between the Member States.

One of the differences compared with EU R&I funds (and most other such initiatives) is that the budget for Regional and Structural Funds is allocated with a quota per EU country (and specific regions depending on certain criteria), "a place-based approach", and the countries and regions administer ("Managing Authority") the funds themselves, open up Calls for projects etc. As an example, for the largest Regional Fund (ERDF) some 300 regional authorities throughout EU Member States will administer the Fund.

Funds from ERDF, ESF and CF can be combined to tailor solutions specific to national and regional needs and challenges to maximize project impact and to avoid fragmentation.

Further, of strategic importance is to know and consider the possibilities to jointly use and strategically coordinate between the Funds (e.g. ERDF, ESF, CF) and other EU programmes (e.g. Horizon 2020, European Innovation Partnerships, Programme for Employment and Social Innovation, and the upcoming EIT-KIC on Innovation for Healthy Living and Active Ageing) and national/regional programmes to plan for strategic synergy effects, to maximize impact and avoid fragmentation.

Just one example: If a Member State and/or a region like to make the challenges and opportunities with Demographic Ageing, Health and Innovation to a strategic priority during 2014-2020 there are ample of such coordination and synergy possibilities (e.g. based on innovation, research, smart specialization, innovation procurement, growth, new jobs, health, healthcare, inclusion, ICT-Digital Agenda). If this is of interest for a country/region do not forget to include such policies, strategic priorities and strategies in the Partnership Agreement and in the Operational Programme. This is a possibility to use the taxpayers' money more efficiently and minimize fragmentation. The initiative to specifically define and use such possibilities for coordination and synergies lays on the Member States and the regions (not on the European Commission although Commission is promoting to find synergy possibilities). To use different Funds for synergy effects and more impact, the general rule, which goes without saying, includes; it is not allowed to use different Funds/Programmes to finance the same cost item and it is not allowed to use one Fund/Programme to finance the own contribution of a project financed from another Fund/Programme.

The following table shows the budget for the Cohesion Policy – the three Funds, ERDF, ESF, and CF – and allocations per EU country during 2014-2020. Allocations are Fund specific to a certain criteria (e.g. economic strengths) of the country/region and, as the table shows, there are Funds with zero allocation to some countries.

The following table shows the total EU 28 allocations of Cohesion Policy Funds 2014-2020*, CF, ERDF, ESF (million €, current prices).

	Cohesion Fund	Less Developed Regions	Transition Regions	More Developed	and northern Coop		Territorial	Youth Employment Initiative	Total
				Regions	sparsely populated	Cross-Border	Transnational	(additional	iotai
		Regions		Regions	regions	Cooperation	Cooperation	allocation)	
BE	=	-	1 039,7	938,6	-	219,0	44,2	42,4	2 283,9
BG	2 278,3	5 089,3	=	-	-	134,2	31,5	55,2	7 588,4
CZ	6 258,9	15 282,5	=	88,2	-	296,7	43,0	13,6	21 982,9
DK	-	-	71,4	255,1	-	204,2	22,7	-	553,4
DE	-	-	9 771,5	8 498,0	-	626,7	338,7	-	19 234,9
EE	1 073,3	2 461,2	-	-	-	49,9	5,5	-	3 590,0
ΙE	-	-	-	951,6	-	150,5	18,3	68,1	1 188,6
EL	3 250,2	7 034,2	2 306,1	2 528,2	-	185,3	46,4	171,5	15 521,9
ES	-	2 040,4	13 399,5	11 074,4	484,1	430,0	187,6	943,5	28 559,5
FR	-	3 407,8	4 253,3	6 348,5	443,3	824,7	264,6	310,2	15 852,5
HR	2 559,5	5 837,5	-	-	-	127,8	18,3	66,2	8 609,4
IT	-	22 324,6	1 102,0	7 692,2	-	890,0	246,7	567,5	32 823,0
CY	269,5	-	-	421,8	-	29,5	3,3	11,6	735,6
LV	1 349,4	3 039,8	-	-	-	84,3	9,3	29,0	4 511,8
LT	2 048,9	4 628,7	-	-	-	99,9	13,9	31,8	6 823,1
LU	-	-	-	39,6	-	18,2	2,0	-	59,7
HU	6 025,4	15 005,2	-	463,7	-	320,4	41,4	49,8	21 905,9
MT	217,7	-	490,2	-	-	15,3	1,7	-	725,0
NL	1	-	-	1 014,6	-	321,8	67,9	-	1 404,3
AT	=	-	72,3	906,0	-	222,9	34,4	-	1 235,6
PL	23 208,0	51 163,6	=	2 242,4	-	543,2	157,3	252,4	77 567,0
PT	2 861,7	16 671,2	257,6	1 275,5	115,7	78,6	43,8	160,8	21 465,0
RO	6 935,0	15 058,8	=	441,3	-	364,0	88,7	106,0	22 993,8
SI	895,4	1 260,0	=	847,3	-	54,5	8,4	9,2	3 074,8
SK	4 168,3	9 483,7	-	44,2	-	201,1	22,3	72,2	13 991,7
FI	-	-	-	999,1	305,3	139,4	21,9	-	1 465,8
SE	-	-	=	1 512,4	206,9	304,2	38,1	44,2	2 105,8
UK	-	2 383,2	2 617,4	5 767,6	-	612,3	253,3	206,1	11 839,9
Interregional cooperation									571,6
Urban innovative actions									371,9
Technical assistance									1 217,6
EU28	63 399,7	182 171,8	35 381,1	54 350,5	1 555,4	7 548,4	2 075,0	3 211,2	351 854,2

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http://ec.europa.eu/regional_policy/index_en.cfm

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http://ec.europa.eu/regional_policy/what/future/eligibility/index_en.cfm

http://ec.europa.eu/esf/home.jsp?langld=en

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Strategic Intelligence Monitor on Personal Health Systems - Report on Best Practices and Key Drivers of Success [Joint Research Centre – IPTS, 2013]: http://ftp.jrc.es/EURdoc/JRC73069.pdf

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European social statistics [Eurostat, 2013]:

http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-FP-13-001

Active ageing and solidarity between generations [Eurostat, 2012]:

http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-EP-11-001

Science, technology and innovation in Europe [Eurostat, 2013]:

http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-GN-13-001

Help Wanted? Providing and Paying for Long-Term Care [OECD, 2011]:

http://www.oecd.org/health/health-systems/helpwantedprovidingandpayingforlong-termcare.htm

OECD Factbook 2011-2012: Economic, Environmental and Social Statistics [OECD, 2011]: http://www.oecd-ilibrary.org/economics/oecd-factbook-2011-2012 factbook-2011-en

Demographic Change and Local Development: Shrinkage, Regeneration and Social Dynamics [OECD, 2012]

https://community.oecd.org/docs/DOC-39889

Global Health and Ageing [WHO, 2011]:

http://www.who.int/ageing/publications/global_health/en/index.html

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http://www.euro.who.int/__data/assets/pdf_file/0003/184161/The-European-Health-Report-2012,-FULL-REPORT-w-cover.pdf

The Global Burden of Disease: Generating Evidence, Guiding Policy – European Union and European Free Trade Association Regional Edition. Institute for Health Metrics and Evaluation. Seattle, WA: IHME, 2013:

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About the author of this report

Silas Olsson has a research background in Health Services Research including Health Technology Assessment focuses on Health Technology when he worked for a national public research and development institute in Sweden.

His further experiences include works in industries, with work on management positions in Swedish and International companies in the field of medical diagnostic and medical therapy systems, as well as with ICT (Information and Communication Technology) and eHealth for supporting developing health systems and to support individual's access to healthcare.

In addition, on European Affairs level (2001-2011), works on administration and management of European R&D and Innovation programmes, such as; European Commission, as Project Officer in the ICT for Health Unit ("eHealth Unit"); Ambient Assisted Living Joint Program (AALJP), as Acting Director, and; with office in Stockholm and Brussels, VINNOVA, the Swedish Governmental Agency for Innovation Systems, as Program Manager and Special Advisor respectively. As Acting Director of the AALJP, he participated in the European Commission's Working Group of the European Innovation Partnership on Active and Healthy Ageing (EIP-AHA) which was mandated to develop the Strategic Implementation Plan of the EIP-AHA.

Silas Olsson is currently working as an independent advisor and consultant in the field of European R&D, Innovations and ICT enabled Solutions, in the domains of HealthCare, Elderly Care, HomeCare/Social Care and Demographic Ageing.

Silas Olsson has published about 150 articles, reports and book chapters, in the fields of Health Services research, Health Technology Assessment and Policy related work regarding ICT enabling solutions in the Health Sector. He has lectured in a substantial number of conferences and seminars in Europe, Asia, and in the US. He is an Editorial Board Member of the International Journal of Telemedicine and Applications.

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