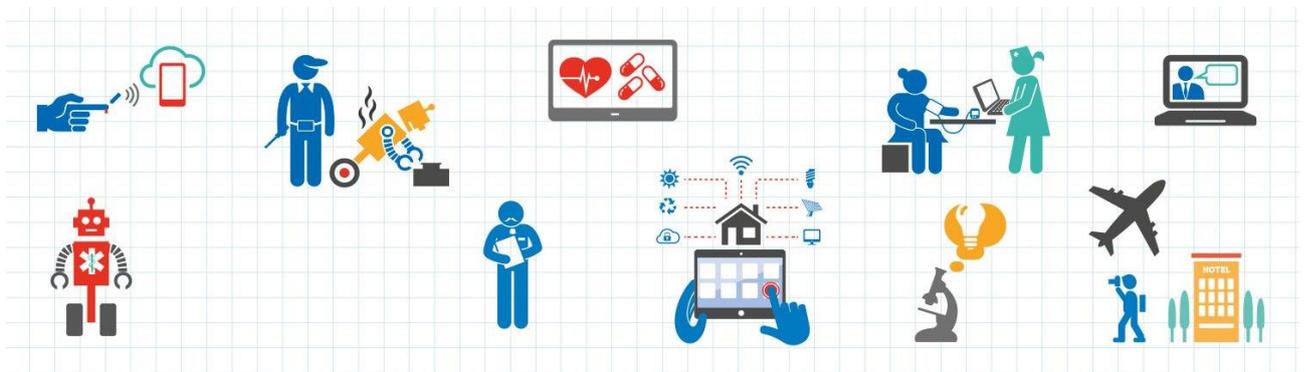


GROWING THE EUROPEAN SILVER ECONOMY



BACKGROUND PAPER

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Disclaimer: The background document has been produced to inform a discussion among stakeholders and does not constitute a formal position, proposal or commitment by the European Commission.



CONTENTS

1. EXECUTIVE SUMMARY.....	3
2. INTRODUCTION.....	5
3. THE CHALLENGE	5
4. THE OPPORTUNITIES	6
5. THE DEFINITION OF "SILVER ECONOMY"	7
6. THE GROWTH AND JOBS POTENTIAL OF THE SILVER ECONOMY	7
7. NEW CONSUMER MARKETS LINKED TO AGEING.....	8
8. PUBLIC EXPENDITURE AND MARKETS LINKED TO AGEING.....	8
9. KEEPING PEOPLE LONGER IN THE LABOUR MARKET.....	9
10. COMMISSION ACTION	9
11. ACTION IN MEMBER STATES AND REGIONS.....	10
12. POTENTIAL BENEFITS OF EU-LEVEL ACTIONS	10
13. A COMMON NARRATIVE ON THE EU SILVER ECONOMY	10
ANNEX II: ONGOING AND NEW SILVER ECONOMY RELATED POLICY INITIATIVES WITHIN THE EUROPEAN COMMISSION.....	16
1 ONGOING AND NEW SILVER ECONOMY RELATED POLICY INITIATIVES	16
1.1 Health	16
1.2 Age-friendly environment	17
1.3 Health and social care systems' transformation.....	18
1.4 Silver Economy Indicators	18
1.5 Fostering jobs and growth	19
1.6 Transversal issues.....	21
1.7 Research and Innovation Funding mechanisms	22
2. RELEVANT ASPECTS OF SILVER ECONOMY TAKEN INTO ACCOUNT IN EUROPEAN COMMISSION'S POLICY INITIATIVES.....	24
3. ACTIVITIES SPECIFICALLY RELATING TO THE SILVER ECONOMY, INCLUDING INNOVATION, ECONOMIC GROWTH AND JOBS	25
4. STUDIES / REPORTS ON DEMOGRAPHIC AGEING	27



1. EXECUTIVE SUMMARY

The Juncker Commission has committed to focus policies on "*the key challenges ahead for our economies and for our societies*" and to work across portfolios to produce "*integrated, well-grounded and well explained initiatives*". One of the challenges identified is "*the ageing of our population*".

Rapid demographic ageing is not only a major societal challenge (in terms of public budgets, workforce, competitiveness and quality of life) but also a major opportunity for new jobs and growth, also referred to as the **Silver Economy**.

In the background paper **Growing the Silver Economy in Europe**, an overview is provided of relevant Silver Economy related initiatives of the European Commission; a tentative narrative on the Silver Economy and an equally tentative analysis of possible EU Silver Economy actions based on existing initiatives and their potential for the generation of new jobs and growth. The paper does not propose any new initiative as such, and the proposed narrative and example actions do not constitute any commitment by the DGs involved at this stage. They serve as input for further consideration.

Rationale

The "Silver Economy" can be defined as the economic opportunities arising from the public and consumer expenditure related to population ageing and the specific needs of the population over 50. The ageing population can be divided in 3 groups, each with their own need-patterns: active, fragile and dependant. Thus the Silver Economy comprises a large part of the general consumer economy, but with considerable differences in spending priorities and patterns.

The Silver Economy is driven both by the emergence of new consumer markets and by the need to improve the sustainability of public expenditure linked to ageing. Merrill Lynch estimates the Silver Economy at \$7 trillion per year, which makes it the 3rd largest economy in the world. By 2020 the private spending power of the elderly generation will reach \$15 trillion globally. As for public spending: in the EU it accounts for 25% of GDP or about 50% of general government expenditure and it is projected to grow by more than 4% of GDP until 2060.

Europe is well placed to benefit from the world-wide ageing trend, amongst others because of the large public sector involvement, implying that public money can be more effectively used to foster new markets and enhance growth potential. Already in 2007 the Council called upon the Commission to seize the opportunities for economic growth associated with the Silver Economy. Stakeholders have often highlighted the need for a strong EU role and broader, cross-DG policy support, e.g. tackling regulatory aspects, privacy, standardisation and usability issues. A number of DGs already pursue policy initiatives relevant to the Silver Economy, as is highlighted in annex II of the background paper.

Consistent coordination across relevant policy areas can strengthen informed policy-making, enhance synergies across policy initiatives, prevent undesirable overlaps and maximise the impact of EU policy outcomes. For example, better age-friendly housing can help people live longer independently and thus reduce costs of long term care. In this case coordinating efforts across policy domains could maximise impact on reducing care costs and enhancing job creation in care and construction.

Better coordination can also help prevent obstacles in relevant emerging EU internal markets, like the diverging German and French standards for age-friendly buildings. The European Standardization Organizations (CEN CENELEC) have announced in June 2014 to be ready to work on EU standards for age-friendliness.



Action in EU

The European Commission is already pursuing policy initiatives relevant to the Silver Economy, e.g. on new markets such as renovation of building stock for independent living, and low-season (senior) tourism; on sustainable long-term care systems; and a life course and social investment approach to social protection systems and services; and also on innovation at EU-scale for active and healthy ageing through (via the European Innovation Partnership on Active and Healthy Ageing [EIP on AHA] and the Active and Assisted Living Joint Programme [AAL JP]). The development of new skills and entrepreneurship meeting the needs of an ageing population is supported by a new Knowledge and Innovation Community on Healthy Living and Active Ageing under the European Institute of Technology while also European Regional funding plays a role, since 110 European regions have identified Active and Healthy Ageing as a smart specialisation priority. They are complemented by national and sectorial initiatives that provide examples for public policy actions, including voluntary norms and quality labels for Silver Economy goods and service providers, which could contribute to competition and cross-border market exploitation a European scale.

A common narrative on the EU Silver Economy

The Europe 2020 strategy calls for citizens in our ageing society to live actively and independently for longer and to continue contributing to the economy and to society. The Silver Economy also fits well with the new Commissions priorities regarding new jobs, growth, investments and strengthening of the industrial base.

Ageing and older adults can be seen as a valuable resource that can contribute to society and live actively while generating new jobs and growth. They can be seen as an asset in the shrinking labour market and as volunteers which are providing valuable services to the society and economy. This should also be seen in the wider context of intergenerational solidarity.

Adaptation to an ageing society requires increased independence and social inclusion. Those aims could be greatly facilitated by better connectedness with peers, carers, employers and medical professionals. It also requires creating age-friendly environments, mainstreaming of accessibility and products and services that can be used by all. Work, family life, housing, hobbies and leisure, travelling and (public) transport, health and social care are crucial to effectively enable active and healthy ageing.

Stimulating the market of products and services addressing the needs of elderly persons can create a massive pull-effect on existing or emerging markets (e.g. independent living & smart homes, health and wellbeing, tourism, skilling, autonomous vehicles, robotics, specialised medical devices and treatments). In many of these markets European economic operators have a strong potential for global leadership.

In the public sector a boost of the Silver Economy would be possible if public expenditure on active and healthy ageing would also be considered an investment as well as a cost. Achieving these objectives would require pro-active public policies designed to enable strategic investments and spending designed to foster active ageing, good health, social inclusion and independence.



2. INTRODUCTION

The rapid demographic ageing is one of the main factors determining future EU and global economic development. It is a major societal challenge as well as a major opportunity for economic growth and jobs ("the Silver Economy").

3. THE CHALLENGE

Europe is going through a major societal challenge in the form of a rapidly ageing population, due to increased longevity combined with stagnating or falling birth rates. The 65+ population as a percentage of the population aged 15-64 is projected to increase from 26% in 2010 to 53% in 2060. In other words, there will be just two people in 'the working age' of 15 to 64 for every person aged 65+ in 2060, compared with four in 2010. Due to the retirement of an ageing workforce and insufficient new recruits, a shortage of up to 2 million health workers in the EU is predicted by 2020.

In 2012 the EU27 public expenditure on social protection amounted to around 20% of GDP¹. **Age-related spending** (including expenditure of first pillar pension schemes as well as expenditure on care for elderly) is predominant and (in the countries for which detailed data is available) represents 8% or more of the GDP or at least 40% of total government expenditure on social protection. This is projected to increase by 4.1 percentage points of GDP by 2060².

Health care expenditures for the EU27 are expected to increase from 7.1% of GDP in 2010 to 8.3% in 2060, while **public spending on long-term care** is projected to double, increasing from 1.8% of GDP in 2010 to 3.4% of GDP in 2060 in the EU as a whole.³ The sustainability of the existing delivery models for health and social care (especially if delivered by family members) is seriously challenged.

Recent economic studies have consistently identified a strong link between adverse demographic trends (that concern Europe as well as China, Asian countries, North America, and to a lesser extent Latin America) and future economic prospects. Converging conclusions emerge from these studies,⁴ that most of the world is now at the point where the "support ratio" (defined as the ratio of producers to effective consumers) is becoming adverse, and that the growth of the global workforce will continue slowing down over the next decades.

¹ Source: General government expenditure on economic function, Eurostat Statistics in focus 8/2014; Eurostat table code: gov_a_exp.

² Source: The 2012 Ageing Report; Economic and budgetary projections for the 27 EU Member States (2010-2060); European Economy 2|2012 [Joint Report prepared by the European Commission (DG ECFIN) and the Economic Policy Committee (AWG)]

³ Source: The 2012 Ageing Report; Economic and budgetary projections for the 27 EU Member States (2010-2060); European Economy 2|2012 [Joint Report prepared by the European Commission (DG ECFIN) and the Economic Policy Committee (AWG)]

⁴ "Secular Stagnation: Facts, Causes and Cures" - Coen Teulings, Richard Baldwin* - 15 August 2014 (<http://www.voxeu.org/content/secular-stagnation-facts-causes-and-cures>) ; "Demography and economics: Look past the past" - Charles A.E. Goodhart (LSE), Philipp Erfurth (Economist, Morgan Stanley) - 04 November 2014 (<http://www.voxeu.org/article/demography-and-economics-look-past-past>)

4. THE OPPORTUNITIES

An ageing society represents a number of opportunities for creation of jobs and growth in Europe. Already in 2007 in a resolution on “Opportunities and challenges of demographic change in Europe”⁵ the Council called upon the Commission to create suitable framework conditions for opening new markets in the context of the Silver Economy and making better use of the opportunities for economic growth. The resolution invited the European Commission to work on a horizontal basis, so that the possible contributions of all policy areas could be considered when developing options to act.

Since then an increasing number of studies and initiatives have been launched of relevance to the Silver Economy, see Annex II.

In 2012 the OECD launched a Silver Economy initiative and several Member States (MS) have followed with initiatives that remain primarily focused on policies and mobilisation of economic operators at national and regional levels.⁶ As national initiatives do not necessarily take into account the cross-border aspects, this could create potential fragmentation risks to those emerging market opportunities, with possible consequences of suboptimal investment and growth levels.

In the US several large companies are moving into Silver Economy markets, such as Google with the acquisition of NEST⁷ and iRobot⁸ as well as Apple with its new eHealth Kit⁹ and Wellness business. In Europe some of the larger companies¹⁰ such as Bosch, Legrand or Philips have developed Silver Economy strategies. There is a potential risk though, that SMEs operating in those markets could be facing growth barriers due to the relatively small scale of national markets in the EU, differing market conditions and a lack of open standards in different sectors¹¹.

⁵ Resolution of the Council of the European Union: “Opportunities and challenges of demographic change in Europe” (6226/07) 22 February 2007

⁶ The Silver Economy is addressed by the OECD in its Silver Economy Initiative (2012), the UK TSB Assisted Living initiative, the initiative of French Government (2013), and the Polish Government Initiative (2014). The active and healthy ageing aspects were recently explored in 'Turning Demographic Ageing in Europe into Opportunities' by HealthAccess Sweden. In its adoption of the Commission's Long Term Care-strategy, the Council acknowledged (§11) that "Responding to the challenges of a great increase in the number of people 80+ also offers important opportunities. Meeting the care needs of a growing population of older people, notably women, is an essential part of what is often called " ".

⁷ Article: <http://online.wsj.com/articles/SB10001424052702303595404579318952802236612>

⁸ Article: <http://finance.yahoo.com/news/irobot-181558574.html>

⁹ Apple eHealth Kit (<https://www.apple.com/ios/whats-new/health/>)

¹⁰ Article Les Echos "Silver Economy: Pourquoi les technologies ont du mal à se développer"[<http://www.lesechos.fr/idees-debats/cercle/cercle-75504-silver-economy-pourquoi-les-technologies-ont-du-mal-a-se-developper-1017304.php>]

¹¹ Ref. report from "Growing the Silver Economy in Europe Stakeholder event" September 2014, EIP on AHA stakeholder consultation and <http://www.lesechos.fr/idees-debats/cercle/cercle-75504-silver-economy-pourquoi-les-technologies-ont-du-mal-a-se-developper-1017304.php>

5. THE DEFINITION OF "SILVER ECONOMY"

For the purpose of this document, "Silver Economy" covers the existing and emerging economic opportunities associated with the growing public and consumer expenditure related to population ageing and the specific needs of the population over 50. Oxford Economics operationally defined the Silver Economy as *'the sum of all economic activity serving the needs of those aged 50 and over including both the products and services they purchase directly and the further economic activity this spending generates'*. Thus the Silver Economy comprises a large part of the general consumer economy, but with considerable differences in spending priorities and patterns, as well as specific niche markets.¹²

The ageing population can be divided in 3 groups, active, fragile and dependant, each with their own pattern of needs.¹³ There is for example a strong correlation between age and disability as statistics on reported disabilities illustrate: 32 % for people aged 55-64, 44 % for people aged 65-74, 60 % for people aged 75-84, 70 % for people aged 85+. Therefore all the Silver Economy markets must take into account functional impairments and accessibility requirements, such as those related to reduced vision, health, dexterity, mobility, cognitive performance.

In addition, for this group of consumers ICT literacy may be below the average of the population.

6. THE GROWTH AND JOBS POTENTIAL OF THE SILVER ECONOMY

Numerous studies have analysed the size, potential and growth projections of the Silver Economy.¹⁴ Merrill Lynch estimates the value of the Silver Economy at \$7 trillion per year, which makes it the 3rd largest economy in the world. According to Euromonitor, the spending power of the now elderly "baby boomer" generation will reach \$15 trillion by 2020 globally.¹⁵

The Silver Economy is driven both by the emergence of new consumer markets for products and services tailored to the ageing population and by the need to improve the sustainability of public expenditure linked to ageing.

¹² No generally accepted definition of the Silver Economy has been established. In an OECD-publication, "silver industry (or Silver Economy) is defined as the industry/sector focusing on producing/providing the aged population oriented products/services." [<http://www.oecd.org/employment/leed/OECD-China-report-Final.pdf>]. "Under the term Silver Economy we understand adaptation of the economy to future needs of growing population of those over 50 years." [Marek Radvanský, Viliam Páleník, "Silver Economy" as possible export direction at ageing Europe – case of Slovakia].

¹³ Ref. the French Silver Economy strategy, launched by the Ministère des Affaires Sociales et de la Santé in December 2013. The initiative defines the Silver Economy as inclusive of different industrial sectors and economic activities targeting the ageing population and that contribute to higher social participation and improvement of quality of life of the elder population. The ageing population is defined in 3 groups; active, fragile and dependant. Source: <http://www.social-sante.gouv.fr/espaces.770/personnes-agees-autonomie.776/dossiers.758/silver-economie.2432/>

¹⁴ http://ec.europa.eu/research/innovation-union/index_en.cfm?section=active-healthy-ageing&pg=library-silvereconomy

¹⁵ Source: Euromonitor Report "Boomers as Consumers" October 2012 (<http://www.euromonitor.com/boomers-as-consumers/report>) and Financial Times "Silver Economy Series" 3 November 2014 (http://www.ft.com/intl/topics/themes/Ageing_populations)

7. NEW CONSUMER MARKETS LINKED TO AGEING

The fast increasing share of the ageing population is set to become a major lead market for many commercial sectors¹⁶. In the past two decades consumer spending among those aged 60 and over rose 50 % faster compared to those under 30.¹⁷

Examples of sectors expected to benefit significantly from the Silver Economy are: cosmetics and fashion, tourism, smart homes supporting independent living, service robotics, health (including medical devices, pharmaceuticals and eHealth) and wellness, safety, culture, education and skills, entertainment, personal and autonomous transport, banking and relevant financial products.¹⁸

8. PUBLIC EXPENDITURE AND MARKETS LINKED TO AGEING

The annual age-related government expenditure of 25% of GDP¹⁹ represents a major market opportunity for innovative products and services.

A developed market of goods and services for active and healthy ageing would have significant impact on the efficiency of health and social care systems, potentially also increasing their sustainability. Large scale and systematic introduction of social and technological innovation (such as eHealth, telecare, integrated care, independent living) has shown the potential to substantially increase efficiency of health and long-term care systems at regional and national level, and lead also to cost savings.

As a case study, the Scottish Telecare Programme to support independent living generated savings of approximately £78.6 million in the period 2006-2010 (coming from reduced institutional costs, hospital admissions, lengths of stay). Results from the telehealth services of the Veterans Health Administration in USA indicate savings of \$1.999 per patient per year.²⁰ If telehealth and telecare were scaled up across Europe to reach 10-20% coverage of the population affected by chronic diseases or old age, this could generate potential markets for new products and services in the range of €10-20 billion a year.²¹

The development of the Silver Economy may also bring important **job opportunities** in related sectors, particularly in health and social services. Healthcare is a key economic sector with significant job opportunities in the medium to long term. Healthcare workers account for 17.2 million jobs or 10% of all jobs in EU28. From 2013 to 2025 health sector employment is expected to grow at a much faster rate (+8.1%) than the overall EU employment (+3%). One million new healthcare jobs are projected by 2020, while an additional 7 million job openings are expected due to replacement needs.

¹⁶ Bank of America Merrill Lynch report 2014: The silver dollar – longevity revolution ref http://www.longfinance.net/images/reports/pdf/baml_silverdollar_2014.pdf

¹⁷ Source: Eurostat

¹⁸ The global market for telehome technologies, or tools that enable outpatients to receive telehealth services, is predicted by the consultancy BCC to grow from \$6.5 billion in 2013 to \$24 billion by 2019. Professional services firm PwC projects that the global mobile health market will reach a value of €17.5 billion in 2017, with Europe being the largest market segment (€5.2 billion). Berg Insight forecasts that the installed base of smart home systems in the EU will grow at a rate above 50% in the next five years to reach 17.4 million smart homes installed in by 2017.

¹⁹ Source: Ageing Report 2012 (DG ECFIN)
(http://ec.europa.eu/economy_finance/publications/european_economy/2012/pdf/ee-2012-2_en.pdf)

²⁰ More information on <http://www.jitscotland.org.uk/action-areas/telehealth-and-telecare/> and <http://c.ymcdn.com/sites/www.hisa.org.au/resource/resmgr/telehealth2014/Adam-Darkins.pdf>.

²¹ Commission's own estimates: Strategic Intelligence Monitor on Personal Health Systems, Phase 2 - Impact Assessment Final Report, 2012, <http://ftp.jrc.es/EURdoc/JRC71183.pdf>.

9. KEEPING PEOPLE LONGER IN THE LABOUR MARKET

The labour market is shrinking and this is rapidly becoming a problem for future jobs and growth. An Accenture study²² has estimated that by increasing the number of older people in the workforce and making productivity-enhancing investments in human capital, governments and businesses could boost economic growth and job creation. According to a study, in Germany alone such measures to harness the “Silver Economy” have the potential to boost GDP by €61 billion and lift employment levels by 1.5 million by 2020.

10. COMMISSION ACTION

As one of the fastest ageing regions in the world, Europe is well placed to benefit from the emergence of the new market opportunities stemming from this global trend. As a comparatively very large portion of the Active & Healthy Ageing (AHA) market is in the public domain, it could create opportunities for public investments (e.g. public research and innovation procurement) to be more effectively used to foster new markets and enhance growth potential.

The European Commission is already pursuing policy initiatives relevant to the Silver Economy, e.g. on

- the potential for new markets and economic drivers such as renovation of building stock, including for independent living, and low-season (senior) tourism;
- the need for ensuring accessible, high-quality and sustainable long-term care systems and for promoting a life course and social investment approach to social protection systems and services;
- stakeholder-driven innovation for active and healthy ageing through large scale innovation actions such as the European Innovation Partnership on Active and Healthy Ageing (EIP on AHA)²³ and the Active and Assisted Living Joint Programme²⁴;
- new skills and entrepreneurship in relation to the needs of an ageing population, supported by a new Knowledge and Innovation Community on Healthy Living and Active Ageing²⁵ under the European Institute of Technology;
- smart specialisation and eligibility for regional funding has led 110 European regions to identify Active and Healthy Ageing as a smart specialisation priority;
- the accessibility, quality and financial sustainability of health and social care systems;
- research and innovation in response to demographic change through H2020;

In addition, the Commission's Joint Research Centre, through its research on eHealth, integrated care and Active and Healthy Ageing contributes to informing policies and provides direct support to the EIP on AHA initiative.

²² Accenture study: Seven myths about population ageing
(<http://www.accenture.com/SiteCollectionDocuments/PDF/Accenture-Seven-Myths-of-Aging-Final.pdf>)

²³ http://ec.europa.eu/research/innovation-union/index_en.cfm?section=active-healthy-ageing

²⁴ <http://www.aal-europe.eu/>

²⁵ <http://eit.europa.eu/eit-community/eit-health>



11. ACTION IN MEMBER STATES AND REGIONS

The already existing national and sectorial initiatives provide examples for public policy actions in the area of Silver Economy:

- The French government's Silver Economy strategy²⁶ includes the development of French voluntary norms and quality labels for Silver Economy goods and service providers.
- In response to the emergence of different national initiatives the European Standardization Organizations (CEN CENELEC) announced in June 2014²⁷ their readiness to work with business and other stakeholders, including groups representing older citizens and consumers, to develop standards for age-friendliness that will meet the needs of an ageing population and support the growth of the "Silver Economy" at European scale.
- In the area of age-friendly buildings, different national standards are already being deployed in Germany and France as basis for public intervention.

12. POTENTIAL BENEFITS OF EU-LEVEL ACTIONS

The Silver Economy is emerging as a significant growth driver for Europe as well as US, Japan and China. In Europe different national and regional initiatives, labels and standards are emerging, which could potentially impede scalable growth opportunities. Lessons learnt from the Innovation Partnership on Active and Healthy Ageing from sectors such as health care or ICT solutions for independent living, indicate that early emergence of incompatible national initiatives, labels and standards can create disincentives for competition and cross-border market exploitation, and may therefore result in slower market growth for new products and services. There might be a risk that these adverse effects could also materialise for other emerging sectors related to the Silver Economy.

Similar conclusions were reached by the European standardisation bodies CEN-CENELEC at the 3rd European Standardization Summit in June 2014. They observed sub-optimal market growth could in particular stem from limited scale of relevant markets, limited availability of affordable and interoperable solutions, as well as limited awareness or appreciation of the benefits of those new products and services.

13. A COMMON NARRATIVE ON THE EU SILVER ECONOMY

Ageing and older adults can be seen as a valuable resource that can contribute to society and live actively while generating new jobs and growth. They can be an asset in the shrinking labour market and can be volunteers providing valuable services to society and economy. This should also be seen in the wider context of intergenerational solidarity.

Ageing comes with setbacks. Older adults are at a much higher risk of chronic conditions, diminishing physical and mental capacities, including mobility. Older adults run a greater risk of poverty and social isolation. Their general quality of live can be at risk when they become isolated, have to give up their independence or relocate to homes for elderly.

²⁶ <http://www.social-sante.gouv.fr/espaces,770/personnes-agees-autonomie,776/dossiers,758/silver-economie,2432/>

²⁷ Conclusions CEN CENELEC 3rd European Standardization Summit Istanbul June 2014
(http://www.cencenelec.eu/News/Press_Releases/Pages/PR-2014-07.aspx)

Adaptation to an ageing society requires enhanced efforts from all to maintain older peoples' independence and sustained social inclusion. Those aims could be greatly facilitated by better connectedness with peers, carers, employers and medical professionals. It also requires creating age-friendly environments, including the mainstreaming of accessibility, and products and services that can be used by all. Work, family life, housing, hobbies and leisure, travelling and (public) transport, health and social care are crucial to effectively enable people to age active and healthy.

Specific products and services for ageing well, in the private as well as the public domains can greatly support active ageing and independent living. This ranges from the adaptation and mainstreaming of products and services in all sectors of the economy (like cars, clothes, travel arrangements, cutlery) to the introduction of integrated robot-enhanced systems supporting independent living for people with chronic conditions and disabilities. They all can help people work more years, staying active after retirement and keep them independent, enjoying a high quality of life. Not by spending more money (public or their own) but by having better products and services to spend it on.



ANNEX I: EU Silver Economy: Some Facts and Figures

1. ABOUT DEMOGRAPHIC CHANGE:

- **Europe has a rapidly ageing population**, because of increased longevity combined with falling fertility. The number of over 80s will double by 2025 and the labour market is shrinking. This will cause a demographic crunch: a strong increase in people no longer working, often in need of long-term health and social care, combined with an imbalance between active and inactive people and a lack of (formal and informal) carers (of over 20 million by 2025). Eurostat's population projections suggest that there will be less than 2 people of working age (15 to 64 years) for every older person aged 65 or more in the EU by 2060. The most rapid change in the size of the working age population are expected to take place during the period 2015 to 2035 when a large part of the boom cohorts are projected to retire²⁸. The sustainability of the existing delivery models for health and social care (especially those depending on families) is seriously challenged.
- **Chronic diseases are on the rise**²⁹, mainly because of ageing. In Europe one in two women and two in five men over 50 years suffer from them. They are responsible for 4 out of 5 deaths in Europe and consume around 75% of the healthcare resources.
- **ICT is essential as a source of innovation**, as it enables integrated person-centred care, with more focus on prevention, early detection and independent living, provided in the own work and home environment. It can empower people to manage their health and support their healthy lifestyle choices.
- In 2012 the EU27 public expenditure on social protection amounted to around 20% of GDP³⁰. **Age-related spending** (including expenditure of first pillar pension schemes as well as expenditure on care for elderly) is predominant and, in the countries for which detailed data is available, it represents often 8% or more of the GDP or at least 40% of total government expenditure on total protection. The expenditure related to "unemployment" in the reporting countries varies from the 0.1% to the 3.3% of the GDP and for the EA17 represents 4 % of total expenditure.
- **According to the 2012 Ageing Report, strictly age-related public expenditure is projected to increase on average by 4.1 percentage points of GDP by 2060 in the EU.** Most of the projected increase in public spending over the period 2010 to 2060 will be on pensions (+1.5 p.p. of GDP), long-term care (+1.5 p.p. of GDP) and health care (+1.1 p.p. of GDP) in the EU."³¹

²⁸ Source: Active ageing and solidarity between generations. A statistical portrait of the European Union 2012, Eurostat.

²⁹ Source: WHO Europe / European Observatory on Health Systems and Policies "Tackling Chronic Disease in Europe" by Reinhard Busse, Miriam Blümel, David Scheller-Kreinsen, Annette Zentner" (http://www.euro.who.int/__data/assets/pdf_file/0008/96632/E93736.pdf)

³⁰ Source: General government expenditure on economic function, Eurostat Statistics in focus 8/2014; Eurostat table code: gov_a_exp.

³¹ Source: The 2012 Ageing Report; Economic and budgetary projections for the 27 EU Member States (2010-2060); European Economy 2|2012 [Joint Report prepared by the European Commission (DG ECFIN) and the Economic Policy Committee (AWG)]

2. ABOUT THE SILVER ECONOMY:

- According to Bank of America Merrill Lynch,³² European consumers over 65 own more than €3500 billion. The Global Silver Economy in 2020 will amount to \$15 trillion (60+ consumer spending power). In the US it is \$7tn today, making it the #3 global economy.
- Specific Sectors of the Silver Economy with high growth-potential include; The Healthcare industry (In 2012, roughly US\$1.6tn of US healthcare spending, about 73% of the total national healthcare spending.); Ageing at home and independent-living products and services (90-91% of seniors want to stay in their own home as they grow older); Technology and online products and services (85% of those aged 50-65 and 59% of population over 65 using the internet. People aged 56-66 spend the most of all generations, averaging US\$650 per quarter).³³

The ICT dimension of the Silver Economy:

- The global **telemedicine** tools market will likely reach \$43.4 billion within five years, according to a new report published by Wellesley, Massachusetts-based BCC Research.
- The market for **telehome** technologies, or tools that enable outpatients to receive telehealth services, is predicted by BCC to grow from \$6.5 billion in 2013 to \$24 billion by 2019.
- PWC forecasts that the global **mobile health** market will reach a value of €17.5 billion in 2017, with Europe being the largest market segment (€5.2 billion).
- Berg Insight forecasts that the installed base of **smart home** systems in the EU will grow at a rate above 50% in the next five years to reach 17.4 million smart homes installed in by 2017.
- McKinsey Global Institute estimates the potential economic impact of the **Internet of Things** to be \$2.7 trillion to \$6.2 trillion per year by 2025. Across the **health-care applications**, Internet of Things technology could have an economic impact of \$1.1 trillion to \$2.5 trillion per year by 2025.
- The GDP contribution of the internet economy in 2010 was € 619 billion, increasing to € 1133 billion in 2016. The G-20 Internet Economy is forecast to grow at an annual rate of 8 % over the next five years. These rates far outpace traditional economic sectors. "No longer confined to high-tech businesses, digital technologies are resulting in the re-imagination of every single industry, holding the promise of creating new jobs and new wealth."
- According to Gigacom³⁴ in 2013 the EU app economy represented 1.8 million jobs (and was valued at €17.5 billion in combined revenue). For 2018 the app economy across the EU is estimated to have potentially 4.8 million jobs (€63 billion in combined revenue).³⁵
- ICT based products and services are fundamental to enable our ageing population to live a more independent and autonomous life, and to sustain the quality of our public health and care. The EIP on Active and Healthy Ageing provides evidence that integrated care (the integration of health and social care) leads to substantial gains in care efficiency and quality of life for citizens and carers.

³² Source Bank of America Merrill Lynch report 2014: The silver dollar – longevity revolution 2014 (http://www.longfinance.net/images/reports/pdf/baml_silverdollar_2014.pdf)

³³ Bank of America Merrill Lynch report 2014: The silver dollar – longevity revolution 2014 (http://www.longfinance.net/images/reports/pdf/baml_silverdollar_2014.pdf)

³⁴ Source: Gigacom http://ec.europa.eu/information_society/newsroom/cf/dae/document.cfm?doc_id=4485.

³⁵ source: Boston Consulting Group "The Internet Economy in the G20" (<https://www.bcg.com/documents/file100409.pdf>)

- 15% of population over 65 uses ICT on a regular basis and many companies still see the "over 65" consumers as a long tail market. Most ICT based products and services are designed with the 15 to 25 year old as early adopters in mind.
- The current **market size for telecare** in the main EU countries: 1.85 million users in the UK, 0.75 million in Spain, 0.5 million in Germany and 0.5 million in France.³⁶ The number of patients connected to some form of 'professional' remote monitoring will grow from 3 million patients now to 19 million worldwide by 2018.³⁷
- The benefits of enabling independent living at home are well described through the evaluation of Scotland's Telecare programme 2006-2010. The programme covers the introduction of a range of devices and services that use technology to enable the ageing population to live with greater independence and safety in their own homes in Scotland.
 - Examples include falls monitors and motion sensors that could alert a neighbour, a local carer, or the emergency services. Other examples include tele-monitoring for chronic diseases or remote programmes supporting adherence to treatment. IT developments are continuously extending the range of devices and services available and, as a result, can help a greater number of older people to remain in their own homes and optimise their independence and quality of life.
 - Around 44,000 people (including over 4,000 people with dementia) received a telecare service as a result of the Scottish Programme, helping to expedite 2,500 hospital discharges and to avoid 8,700 emergency admissions to hospital and over 3,800 admissions to care homes. The external evaluation also highlighted the improved quality of life experienced by both service users and carers. The investment of £13 million is estimated to have saved about £48.4 million.
- The sales of **service robots** for domestic tasks could reach 15.5 million units in the period 2013-2016, with an estimated value of \$ 5.6 billion, while the sales of robots for elderly and handicap assistance will be about 6,400 units. This market will increase substantially within the next 20 years.³⁸
- **The market for smart homes** (integrating ICT- and communication devices that anticipate and respond to the needs of residents) is expected to grow remarkably, with revenue estimated to reach \$51.77 billion by 2020. Among the major players in this industry are Siemens AG (Germany), Schneider Electric S.A. (France), ABB Ltd. (Switzerland), Ingersoll-Rand PLC (Ireland), Tyco International Ltd. (Switzerland), Emerson Electric Co. (U.S.), Legrand S.A. (France), Crestron Electronics, Inc. (U.S.) , Lutron Electronics, Inc. (U.S.), and Control4 Corporation (US).³⁹

³⁶ Figures from Tunstall - presentation at the Mobile World Congress 2014, Barcelona: http://www.b2match.eu/system/echalliance-at-mobileworldcongress2014/files/14.Joe_Killen_.pdf?1393850488

³⁶ Source: Berg Insights report 2014 "Smart Homes" (<http://www.berginsight.com/ReportPDF/ProductSheet/bi-sh1-ps.pdf>)

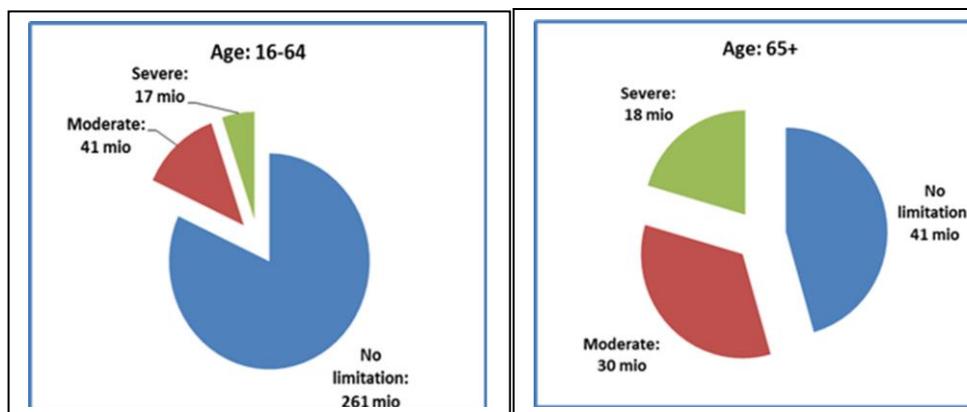
³⁷ Source: Berg Insight report 2014 "Smart Homes" (<http://www.berginsight.com/ReportPDF/ProductSheet/bi-sh1-ps.pdf>)

³⁸ Source: International Federation for Robotics 2013 report. (<Http://www.ifr.org/service-robots/statistics/>)

³⁹ Source: CAGR from 2013 – 2020 is estimated at 17.74%. (<http://www.marketsandmarkets.com/Market-Reports/smart-homes-and-assisted-living-advanced-technologie-and-global-market-121.html>)



- There is a strong correlation between age and disability:
 - 32 % people aged 55-64 report a disability
 - 44 % people aged 65-74 report a disability
 - 60 % people aged 75-84 report a disability
 - 70 % people aged 85+ report a disability⁴⁰
- The growing ageing population is increasing the number of people with disabilities and consequently the needs in terms of accessibility and inclusive and accessible home and community-based care and services.⁴¹



3. THE POTENTIAL FOR JOB-CREATION ALREADY QUANTIFIED:

- The Employment Package "Towards a job-rich recovery" (18 April 2012) identified key drivers for future job creation opportunities in Europe over the next decades. Key points:
- **Meeting the fast growing demand for professionals in health and social care.** Demand in the EU health and social care sectors is growing twice as fast as the overall employment growth. The size and growth rate of these sectors suggests they will remain a key driver in providing new jobs in the years to come. 7 million additional job openings are expected due to replacement needs and a further 1 million new jobs between 2010 and 2020. To benefit from this job creation potential, specific challenges have to be met: recruitment and retention of health and care professionals; emergence of new delivery patterns (e.g. for health and long-term care) and the growing use of technologies (requiring skills upgrading and new types of jobs).
- **Meeting the growing demand for ICT professionals.** The number of ICT practitioners in the EU grew by around 3% a year and will continue to do so, with labour demand increasingly outstripping the supply. The development and dissemination of ICT applications will be crucial for the international competitiveness of European business and will contribute to employment.
- **Improving the balance between work and care.** Especially female workers often care for children or frail or dependent parents and try to balance their **professional life and caring duties**. A better balance would improve female labour participation (less reduction in working hours and job dropping) and would reduce the risk of poverty (which is significantly higher for families with heavy burdened family carers).

⁴⁰ Source: Eurostat

⁴¹ SILC 2012

ANNEX II: ONGOING AND NEW SILVER ECONOMY RELATED POLICY INITIATIVES WITHIN THE EUROPEAN COMMISSION

1 ONGOING AND NEW SILVER ECONOMY RELATED POLICY INITIATIVES

1.1 Health

DG SANTE:

- EU Health Programme 2008-2013 – investing in health and addressing the issue of the ageing society (number of projects still running)
 - EUNAAPA: EUropean Network for Action on Ageing and Physical Activity - promote evidence based physical activity for the elderly.
 - ICARE4U: Innovating Care for People with Multiple Chronic Conditions in Europe – promote knowledge of potentially effective and efficient models of integrate care for European citizens with multiple chronic conditions.
 - ACT: Advancing Care Coordination & TeleHealth Deployment Programme
 - MPI_AGE: Using Multidimensional Prognostic Indices (MPI) - improve cost-effectiveness of health interventions in multimorbid frail older people.
 - HASIC: Healthy Ageing Supported by Internet and the Community - empower older people in Europe to adopt healthy lifestyles (diet, physical activity, social participation).
 - MANAGE-CARE: Active Ageing with Type 2 Diabetes - a model for innovative chronic care management.
 - e-CAPACIT8 – capacity-building for European occupational health professionals to facilitate the process of workers' ageing.
- Preparatory action: 'Healthy diet: Early years and Ageing Population'
- Early Diagnosis and Screening of Chronic Diseases
- Adherence, Frailty, Integrated Care and Multi-chronic Conditions
- Cross-border Directive on Patient Rights (includes e-prescription guidelines)
- Regulation on Nutrition and Health Claims made on Foods – Regulation (EC) No. 1924/2006
- Communication on a EU initiative on Alzheimer's disease and other dementias (2009)
- ALCOVE Joint Action (EC co-founded) - bringing together the Commission and 19 Member States
- CHRODIS-JA: Joint Action on Chronic disease and Healthy Ageing - exchange and transfer of good practices between European countries and regions.
- New Joint Action on Dementia led by Scotland, including coordination of the Group of Governmental experts on dementia (meet twice a year).
- Implementation report on the Commission Communication on a 'European initiative on Alzheimer's disease and other dementias' published Oct 2014.
- Plans to launch a pilot project funded by the European Parliament on 'Developing evidence based strategies to improve the health of isolated and vulnerable persons'. Elderly constitute one of the target groups.
- ESIF: Active and healthy ageing thematic objective. Interservice work with EMPL and REGIO on the draft Partnership Programmes and Operational Programmes.

DG JRC:

(JRC Institute for Health and Consumer Protection (IHCP), Public Health Policy Support Unit)

- The role of nutrition in promoting active healthy ageing - a feasibility analysis of the potential need of harmonised dietary guidance for the elderly in Europe.
- Study on the potential contribution of behavioural economics to protect ageing consumers e.g. when they make decisions with financial impact.

DG RTD:

- The EU has established a shared vision for a holistic approach to ageing research by mapping the gaps and needs. European research on ageing is highly regarded as illustrated by European publications being the most cited in the world⁴².
- From 2007-2013, the European Union (EU) has financed some 220 research projects (worth € 532 Million) in biogerontology (FP7). These projects have established new models addressing human development, markers of cellular senescence, epigenetics and longevity determination; integrated national and international cohorts; addressed therapeutic approaches to age-specific pathologies through investigator-driven clinical trials (e.g. falls prevention, cognitive decline, vitamin D deficiency, multimodality); and integrated therapeutic strategies adapted to real-life (co-morbidity, poly-medication, technology and devices, elderly patients and systems biology).
- Some € 650 million have been invested on research on neurodegenerative diseases, including € 330 million for research on Alzheimer's disease.

1.2 Age-friendly environment

DG JUST

Work on Accessibility, following a 'design for all' approach. As indicated in the Commission Work Programme 2015, The European Commission is committed to equality of opportunity for people with disabilities, in full respect of the UN Convention on the Rights of Person with Disabilities. This includes accessibility to the physical environment, transportation, information and communications technologies and systems (ICT) and other facilities/services :

- European Accessibility Act - EAA - The preparatory work is addressing accessibility from different perspectives. Improving accessibility of products and services would be of benefit to persons with disabilities, older persons, people with small children, pregnant women as well as other groups with functional limitations whether permanent or temporary.. The Commission services' preparatory work on a European Accessibility Act continues.
- Each year since 2010, the **Commission's Access City Award** recognises cities for their efforts to remove barriers that people with disabilities face in key aspects of everyday life and to improve accessibility.

⁴² Aging Research, Publication Analysis 1999-2010, by Ralf Neumann, Labtimes 04/2012



1.3 Health and social care systems' transformation

DG EMPL:

- The Social Investment Package (SIP) - an integrated framework for social policy reform and the modernization of social protection systems and services, structured around social investment to prevent against risks, respond as early as possible and support people at different stages of their lives, regarding inclusion in society and the labour market. EMPL is currently carrying out a number of follow-up actions to the SIP. <http://ec.europa.eu/social/main.jsp?langId=en&catId=1044>
- Social policy innovation can help and is often needed to rapidly disseminate. Social policy innovation is vital for supporting reforms e.g. ICT-based solutions. <http://ec.europa.eu/social/main.jsp?catId=1022&langId=en>
- Report on Adequate social protection for long-term care needs in an ageing society (together with the Social Protection Committee; May 2014). <http://ec.europa.eu/social/main.jsp?catId=792&langId=en>

DG JRC

(JRC Institute for Prospective Technological Studies (IPTS)):

- Strategic Intelligence Monitor on Personal Health Systems (SIMPHS). Analysis of 25 success cases of integrated care and independent living for chronic patients and older people. The clinical and economic impact, barriers and drivers, governance model, and funding and financing models are analysed, to support further scaling up in Europe.
- Long-term Care Strategies for Independent Living of Elderly People (ICT AGE project; with DG EMPL, within SIP framework) - to support recommendations to Member States on long-term care strategies promoting technology based solutions to enable older adults to continue living at home.
- ICT enabled Social Innovation supporting the Implementation of the Social Investment Package (IESI project) - how ICT-based Social Innovation can support policies promoting social investment.

1.4 Silver Economy Indicators

DG EUROSTAT:

- Providing statistical evidence and expertise to support the implementation of a number of EU or international policy initiatives related to the silver economy.
- Include an age variable in all surveys on individuals which allows a break down by age group, e.g. for statistics related to labour market, income and living conditions, health, education or ICT usage.
- On-online indicator providing demographic characteristics (for Sustainable Development Strategy).
- Contribution to the UNECE Expert Group on Ageing Statistics (final recommendation upcoming), including organising a joint Work Session on Demographic Projections (2013).

DG SANTE

- European Community Health Indicators Monitoring Joint Action (ECHIM JA) - has identified indicators on healthy ageing/ageing population as part of the European Core Health Indicators (ECHI)
- Health status indicators for age group 65+, e.g. Life Expectancy (ECHI 10) or Healthy Life Years (ECHI 40), presented in the Public Health website in the Ageing page on indicators.
- ECHI shortlist - influenza vaccination rate in elderly (65+, ECHI 57) and to a lesser extent Breast cancer screening (50-69, ECHI 58), Colon cancer screening (50-74, ECHI 60).

DG JRC

- Monitoring and Assessment Framework for the EIP on Active and Healthy Ageing (MAFEIP) - to measure the impact of the initiative on the targets of the EIP AHA, namely increasing by 2HLY the healthy life of European citizens and contributing to better health and quality of life, more sustainable health systems, and innovation and growth.

DG EMPL

- Monitoring tool Active Ageing Index (AAI) is an outcome of the European Year for Active Ageing and Solidarity between Generations 2012; developed with the United Nations Economic Commission for Europe (UNECE). It is a composite index which focuses on the contribution older people make to society and hence on the sustainability of high welfare standards for older people in ageing societies. AAI uses data from sources such as Eurostat (Labour Force Survey, Statistics on Income and Living Conditions – EU-SILC) and the European Foundation (European Quality of Life Survey). The AAI has four dimensions, which are composed of 22 indicators:
 1. Employment (employment rate 55-59, 60-64, 65-69, 70-74);
 2. Participation in society (voluntary activities; care for children, grandchildren, older adults; political participation);
 3. Independent, healthy and secure living (physical exercise, access to health services, independent living, financial security (3 indicators), physical safety, lifelong learning);
 4. Capacity and enabling environment for active ageing (remaining life expectancy at age 55, share of healthy life expectancy at age 55, mental wellbeing, use of ICT, social connectedness, educational attainment).
- The first results of the index were presented at the end of the European Year in 2012, using data for 2010. The second wave of the index was calculated in 2014 with 2012 data.⁴³

⁴³ <http://www1.unece.org/stat/platform/display/AAI/Active+Ageing+Index+Home>



1.5 Fostering jobs and growth

DG SANTE

- The Commission's 2012 Action Plan for the EU health workforce launched several initiatives to better forecast labour needs and to anticipate skill needs (Joint Action on health workforce planning and forecasting) and to exchange good practice to improve continuous professional development and to recruit and retain healthcare staff.
- In 2015, a new project will establish a network to identify the core competences of healthcare assistants, who have a key role in elderly care.

DG CNECT:

- European Innovation Partnership on Active and Healthy Ageing (2010 - 2020)
The European Innovation Partnership on Active and Healthy Ageing (EIP AHA) is one of the 5 European Innovation Partnerships of the EU 2020 strategy for sustainable growth and jobs. It brings together all relevant stakeholders to achieve (technological and systemic) innovation at European scale and to help create new jobs and growth for Industry in Active and Healthy Ageing, enhancing the competitiveness of European industry in this fast growing global market. It involves more than 3000 stakeholders and 33 reference sites and mobilises own funding of more than € 1 Billion [together with DG SANTE].
<http://ec.europa.eu/active-healthy-ageing>
<https://webgate.ec.europa.eu/eipaha/news/index/show/id/658>

DG EAC:

- Lifelong learning, adult education, providing skills all through life has been shown not only to enhance economic participation but also quality of life, health, adaptability. They have been and still are at the heart the activities of DG EAC, presently under the ERASMUS + programme. Life Long Learning policies, among other things, maximise ability to learn in old age. The WHO suggests that education in early life and opportunities for LLL can help people develop the skills and confidence they need to adapt and stay independent as they grow older. A big challenge is that tools, methods and resources have changed tremendously since the individuals' active learning phase. Accessibility of older people to training is an important consideration. While adult education, LLL and informal learning are important, for the moment in most countries they are not necessarily specifically aiming at the older cohorts.
- **Knowledge and Innovation Communities (EIT-KICs)**
In February 2014, the European Institute of Innovation and Technology (EIT) launched the selection process for two new KICs, including one on the thematic areas of Innovation for healthy living and active ageing. As regards skills specifically, a KIC on this theme would have the added value of linking activities of innovation and higher education with the already existing research base. It will put emphasis on higher education curricula, new skills development (for technology development and elderly care), and strengthening entrepreneurial aspects in order to develop a highly entrepreneurial workforce in the area. It will also support the development of new products and services, and strengthen existing value chains and create new ones (see fact sheet for more details). http://eit.europa.eu/sites/default/files/SIA_Factsheets_Health_and_Raw_Materials.pdf

- **ECVET for elderly care**

ECVET is an initiative designed to promote European cooperation within specific sectors of the economy to develop vocational skills from the perspective of labour market needs, so that more individuals are able to acquire marketable skills.

The project ECVET for Elderly Care (EFEC) improves the comparability, transparency and mutual recognition of qualifications in the six partner countries and implements ECVET principles in the elderly care work. EFEC aims to develop a new education scheme for elderly care based on the needs of working life, to ease the implementation of ECVET in the field of social and health care.

DG EMPL:

- The new EU Strategic Framework on health and safety at work 2014-2020 has identified demographic change as a main challenge, and in particular the need to address the ageing of workforce as one of its key strategic objectives. It proposes concrete action to address this issue. Actions include the identification and exchange of good practices to improve OSH conditions for older workers, the promotion of rehabilitation and reintegration measures, and the raising of awareness and sharing of information and tools through the Healthy Workplaces Campaigns coordinated by the European Agency for Safety and Health at Work (EU-OSHA).

<http://ec.europa.eu/social/main.jsp?catId=151&langId=en>

- The Commission is currently implementing a pilot project initiated by the European Parliament on health and safety at work of older workers. EU-OSHA is conducting on behalf of the Commission the pilot project (from June 2013 until the end of 2015) investigating OSH policies and initiatives taken as well as tools available at EU, national, intermediaries and company level. It looks at prevention, promotion, rehabilitation and return-to-work measures in the context of older workers and explores specific issues related to gender. An assessment should be made as to the appropriateness of a preparatory action with a view to putting in place a Union instrument to reach the objective of ensuring that 75 % of the population aged from 20 to 64 is in employment, as set out in the Europe 2020 Strategy, and of promoting the physical and psychological health of older workers. https://osha.europa.eu/en/priority_groups/ageingworkers/ep-osh-project.

- EMPL also deals with other aspects related to ageing such as pensions (2012 white paper and follow-up actions), employment of older workers (2012 employment package and follow-up actions).

<http://ec.europa.eu/social/main.jsp?catId=752&langId=en>

<http://ec.europa.eu/social/main.jsp?langId=en&catId=1039>

1.6 Transversal issues

DG CNECT

- **Green paper on EU mHealth strategy**

As part of the eHealth 2020 policy, a green paper on mobile Health has been produced by the European Commission which has subsequently been subject to a public consultation.

<http://ec.europa.eu/digital-agenda/en/news/green-paper-mobile-health-mhealth>



- **Data Protection Directive**

The Commission has proposed a new Directive on Data Protection which has crucial importance for the development of new applications and services for active and healthy ageing that build on large scale data collection (together with DG SANTE, DG JUST).

<http://ec.europa.eu/justice/data-protection/>

1.7 Research and Innovation Funding mechanisms

DG CNECT:

- **Horizon 2020 Societal Challenge 1: Health, demographic change and wellbeing**

As part of the Horizon 2020 framework programme for Research and Innovation, DG CNECT has responsibility for ICT for health, demographic change and wellbeing within Societal Challenge 1, with a budget around € 500M (2014-2020). There are currently around 50 projects running, including R&D, innovation and pilot projects, pre-commercial procurement of research, and procurement of innovation in active and healthy ageing. <http://ec.europa.eu/digital-agenda/en/policies-ageing-well-ict>

- **The Active and Assisted Living Joint Programme** is a Member State driven € 350 million funding programme for applied market-oriented innovation on ICT products and services for ageing well. It aims to accelerate the emergence of innovative products and services targeting the needs of an ageing population. Over 120 projects are launched with 40% SME involvement. AAL JP 2014 – 2020 is co-funded from Horizon 2020 (together with Member States) as part of the Innovation Investment Package. <http://www.aal-europe.eu>

- **Joint Programming Initiative More Years – Better Lives (JPI MYBL)** is a joint initiative of 15 EU countries to align national research strategies and develop new multi-disciplinary knowledge on Active and Healthy Ageing in response to policy makers' needs. Aim is to mobilise more than € 150 M national research funding (together with Member States). <http://www.jp-demographic.eu/>

DG RTD:

- The EU has established the **Joint Programming Initiatives (JPI)**, with the aim for the Member States to establish and implement common strategic research agendas, share good practices, and work together to tackle important social challenges. The various JPIs include initiatives on combatting neurodegenerative diseases - especially Alzheimer (JPND⁴⁴), demographic changes (More Years Better Lives⁴⁵), and creating attractive, sustainable and economically viable urban areas (the Urban Europe⁴⁶).

- **Innovative Medicine Initiative (IMI)**. IMI is a Public-Private Partnership with the European Federation of Pharmaceutical Industries and Associations (EFPIA), initiated under FP7 and continued under Horizon 2020, to modernise and accelerate the drug development process by providing new tools and methodologies for the development of safer and more efficient medicines. IMI pools resources and expertise from different stakeholders (large pharmaceutical players, academics, SMEs, patient organisations, and regulatory authorities) to address specific and well-

⁴⁴ <http://www.neurodegenerationresearch.eu/>

⁴⁵ <http://www.jp-demographic.eu/>

⁴⁶ <http://jpi-urbaneurope.eu/>



focused scientific challenges. Under IMI2 new projects will be launched in ageing-related in the following years⁴⁷.

- **Joint Programming Initiative on Neurodegenerative Diseases Research (JPND).** Through JPND the EU supports the coordination of national research efforts. The JPND is a Member States-led initiative with the main purpose of de-fragmentation through common research strategy and alignment of national programmes. The JPND gathers 28 countries (including non-EU countries such as Canada). The JPND has shown its clear value added in three main areas:

A) Mapping and analysis of national and European research and infrastructures relevant to neurodegenerative diseases, to underpin the JPND Strategic Research Agenda (SRA) and ensure the recommendations take due consideration of the existing research landscape.

B) The JPND Strategic Research Agenda with 5 thematic priorities for research: 1) origins of neurodegenerative disease, 2) disease mechanisms and models, 3) disease definitions and diagnosis, 4) developing therapies, preventive strategies and interventions and 5) healthcare and social care. The estimated committed funds by JPND member countries for actions 2011 - 2014 are € 100 million.

C) Development of national research agendas in the area of neurodegenerative diseases and alignment of national plans and strategies, showing a clear footprint of the JPND SRA.

The JPND is further supported by H2020 through an ERA-Net Cofund for a transnational call with EU co-funding, with a view to scale up the implementation of the JPND Research Strategy.

- **Joint Programming Initiative A Healthy Diet for a Healthy Life** on the determinants of diet and physical activity, diet and food production, and diet-related chronic diseases.
- **Horizon 2020.** Horizon 2020 is the current EU research and innovation programme 2014-2020. A budget of € 8.5 billion has been allocated to the 'Health, demographic change and wellbeing' challenge. Ageing is central to this challenge. Understanding the ageing process and the underlying causes of disease is crucial to the prevention and the treatment of age-related diseases and allows for a healthy, dignified and active ageing. The first calls of 2014/2015⁴⁸ gave a particular emphasis to healthy ageing with issues like 'understanding health, ageing and disease', 'comparing the effectiveness of existing healthcare interventions in the elderly', 'advancing active and healthy ageing with ICT', 'promoting mental wellbeing in the ageing population', and 'understanding common mechanisms of diseases and their relevance in co-morbidities'.
- **G8 declaration on dementia:**

The Declaration and Communiqué⁴⁹ set out an international commitment to closer collaboration on dementia, in particular:

- to identify a cure or disease modifying therapy by 2025, and to increase collectively and significantly the funding for dementia research to reach that goal.
- to share information on funded research, identify strategic priority areas, and share initiatives for big data, for collaboration and cooperation.
- To develop a coordinated international research action plan, including the current state of science, gaps and opportunities, and laying out a plan for working together to address them.
- To significantly increase the number of people involved in clinical studies.

⁴⁷ <http://www.imi.europa.eu/>

⁴⁸ <http://ec.europa.eu/programmes/horizon2020/en/h2020-section/health-demographic-change-and-wellbeing>

⁴⁹ <https://www.gov.uk/government/publications/g8-dementia-summit-agreements>

- To appoint a global Dementia Innovation Envoy to draw together international expertise to stimulate innovation and co-ordinate international efforts to attract new sources of funding.
 - To promote information and data sharing from research studies.
 - The global actions on dementia include the creation of the World Dementia Council; Legacy events; The OECD initiative and The Global Alzheimer's and Dementia Alliance.
- Research in demographic change: studying ageing, longevity, societal trends and evolving lifestyles, welfare policies.

2. RELEVANT ASPECTS OF SILVER ECONOMY TAKEN INTO ACCOUNT IN EUROPEAN COMMISSION'S POLICY INITIATIVES

DG CNECT:

- The research, Innovation and policy initiatives focuses on the triple win:
 - Better quality of life for Citizens as patients, carers and employees,
 - Improved sustainability of health and care systems
 - Stimulation of new jobs and growth

DG RTD:

- Personalising health and Care
- Strengthening the health industrial sector
- Stimulating the innovation market with strong support to SMEs in the field.

DG EMPL:

- Activities exploring how the growing gap between needs for long term care (LTC) and resources for providing care can be reduced through proactive policy approaches, including by measures to prevent people from becoming dependent on care from others; measures promoting healthy life styles, tackling the major causes of dependence and promoting age-friendly environments in homes and neighbourhoods; rehabilitation and re-enablement for those whose health and fitness have been impaired to improve and maintain their ability to live independently; realising the full potential of technology to help older people to remain at home, to raise the productivity of care services and to compensate for the expected decline in the number of carers; enhancing support for family carers and making it easier for them to reconcile family and care responsibilities.

DG JRC:

- The role of nutrition in active and healthy ageing
- Gradual cognitive decline
- Chronic diseases management, impact of integrated care and independent living initiatives on patients and health and social care systems, patient empowerment.
- Products and prototypes focusing on integrated care and independent living.



- Same as EIP on AHA (health outcomes, economic outcomes, innovation and growth impact)
- Long-term care, social impact

DG JUST:

- There is a strong correlation between age and disability (source: Eurostat). The development of an ageing population is increasing the number of people with disabilities and consequently the needs in terms of accessibility and inclusive and accessible home and community-based care and services.

3. ACTIVITIES SPECIFICALLY RELATING TO THE SILVER ECONOMY, INCLUDING INNOVATION, ECONOMIC GROWTH AND JOBS

DG CNECT:

- Most of the measures undertaken relate directly to new jobs and growth, including the stimulation of SMEs to put products and services on the market, the generation of new standards and interoperability of new products and services, co-funding joint large scale procurement of innovative products and services to create scalable markets across countries, development of highly innovative ideas for new products and services for ageing well, scaling up of good practices across regions and Member States.

DG RTD:

- Many of RTD activities are directly relevant to the Silver Economy, especially by increasing knowledge of basic biological ageing process to developing health markets for the benefit of the elderly population.

DG EAC

- Anticipating and forecasting the skills needs of sectors which particularly concern the ageing population is important. The care and health sectors are two of the sectors with fastest expected employment growth up to 2025. The European Skills Panorama, EUSP, aims to bring together information on skills needs and skills-related labour market intelligence.

<http://euskilspanorama.cedefop.europa.eu/AnalyticalHighlights/>

- Anticipating the skills necessary for ageing population markets is also key in other sectors such as tourism and leisure and across the manufacturing sector. It is important that the occupations, skills and qualifications in the sectors related to ageing and the silver economy are clearly classified, recognised and transparent. The European Area for Skills and Qualifications (EASQ), an action under the 2012 Rethinking Education communication "Investing in Skills for better socio-economic outcomes", aims at:
 - Promoting the recognition and transparency of skills and qualifications, within and across countries.
 - Promoting the development of higher and more relevant skills, in order to support growth, employment and innovation.



- Promoting flexible learning pathways, allowing individuals to combine different learning experiences according to their needs (different education and training sectors, non-formal and informal learning).
- A number of transparency and recognition instruments exist under the EASQ including:
 - the European Qualifications Framework ESQ, adopted in 2008, which is a reference framework relating different countries' qualifications systems, the purpose being to make national qualifications more readable and understandable to employers, individuals and institutions across Europe.
 - ESCO Multilingual classification of European Skills, Competences, Qualifications and Occupations, the purpose of which is to facilitate the dialogue between the labour market and the education/training sector to help overcome and prevent skills mismatches and skills shortages in the EU.
- With regard to skills necessary for those working in the new consumer markets related to the silver economy, EAC/A3 also works intensively on facilitating the transversal skills, ICT education and entrepreneurship education.
<http://www.adam-europe.eu/adam/project/view.htm?prj=10484>

DG EMPL:

- Many of the measures mentioned above are related to the Silver Economy such as measures for detecting frailty, promoting age-friendly environments, making use of technology, rehabilitation and re-enablement services for older people and providing long-term care services. The development of better products and services is of great importance in this respect. This could result in important opportunities for economic growth and job development.

DG EUROSTAT:

- Eurostat produces or could produce a number of indicators for the population aged 50+, 65+ or 75+.
 - For demographic indicators:
<http://epp.eurostat.ec.europa.eu/portal/page/portal/population/data/database>
 - For social inclusion indicators:
http://epp.eurostat.ec.europa.eu/portal/page/portal/income_social_inclusion_living_conditions/data/database
 - For labour market indicators:
http://epp.eurostat.ec.europa.eu/portal/page/portal/employment_unemployment_lfs/data/database
 - For ICT (Information society statistics):
http://epp.eurostat.ec.europa.eu/portal/page/portal/information_society/data/database
 - For health indicators:
<http://epp.eurostat.ec.europa.eu/portal/page/portal/health/introduction>
 - For education and training indicators:
<http://epp.eurostat.ec.europa.eu/portal/page/portal/education/data/database>



DG JRC:

- Innovation: care organisation/transformation, new roles; Map of stakeholders, products and prototypes.
- Measuring innovation and growth achieved in the EIP: monitoring No of jobs/companies created and No of devices/users.

DG EMPL (previously JUST):

- The European Accessibility Act aims at promoting innovation and economic growth by contributing to a better functioning internal market: making it easier for companies to sell and operate in another EU country, boosting cross-border trade and enhancing competition. The content of a future proposal cannot be prejudged at this stage.

DG SANTE:

- Actions to improve the prevention, diagnosis and treatment of dementia, as well as the quality of life of people living with dementia and their families (informal carers);
- ESIF: Health and safety at workplace, health promotion (including for vulnerable groups), innovation and research in health.

4. STUDIES / REPORTS ON DEMOGRAPHIC AGEING

DG RTD:

- Roadmaps on ageing research: Futurage (<http://futurage.group.shef.ac.uk/assets/files/Final%20road%20map/FUTURAGE%20A%20Road%20Map%20for%20European%20Ageing%20Research%20-%20October%202011.pdf>)
- Population ageing in Europe: facts, implications and policies (*Outcomes of EU-funded research*) http://ec.europa.eu/research/social-sciences/pdf/policy_reviews/kina26426enc.pdf

DG EAC:

- EAC B2 (Vocational Training and Adult Education) has done a study (with ICF GHK, Danish Technology Institute and Technopolis on active ageing and intergenerational learning. This brings together and summarises key findings of projects funded by the Grundtvig programme. Launched in 2000 and part of the overarching Lifelong Learning Programme, Grundtvig aimed to provide adults with ways to improve their knowledge and skills, keeping them mentally fit and potentially more employable. The study drew on the results of 22 case studies. A related conference was held in November 2012 in Brussels, "One Step up in later life – learning for active ageing and inter-generational solidarity" and a conference memorandum with main messages is attached. Clearly, with a view to the medium to long term, adult education and LLL and informal learning are all important, but for the moment in most countries, they are not specifically aiming at the older cohorts.

DG EMPL:

- (2012) The EU contribution to active ageing and solidarity between generations provides a good overview of the different policy activities within the Commission.
<http://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=6920&type=2&furtherPubs=yes>
- (2012) Demography, active ageing and pensions - Social Europe guide - Volume 3
<http://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=6805&type=2&furtherPubs=yes>

EUROSTAT:

- SDI Monitoring Report (See above)
- Active ageing and solidarity between generations. A statistical portrait of the European Union 2012
- The greying of the baby boomers - Issue number 23/2011
- EUROPOP2013 projections.

DG JRC:

- Report (expected 01/01/2015) on consequences of the ageing of European population on economic decision making of consumers, taking insights from behavioural sciences.
- Report on "The role of Nutrition in Active and Healthy Ageing" to raise awareness on the importance of diet and nutrition to ensure healthier and more productive older citizens.
<http://publications.jrc.ec.europa.eu/repository/bitstream/111111111/32095/1/lbna26666enn.pdf>
- SIMPHS case study reports
- Map of stakeholders, spring 2015.
- SIMPHS2 reports at: <http://is.jrc.ec.europa.eu/pages/TFS/SIMPHS2deliverables.html>
- The SIMPHS Repository (developed in SIMPHS1 and updated in SIMPHS2) offers users with an interest in integrated care, telehealth, telecare, remote patient monitoring ageing and eHealth at large a single point of information providing access to all the data gathered through the SIMPHS research. The repository contains data on relevant policies and legislation, research outcomes, market data, publicly available reports, scientific evidence etc.
(<http://iscsp.jrc.ec.europa.eu/group/simphs-repository>)
- MAFEIP report on modelling to be available by end 2014
- ICT-AGE: Report on Mapping of effective technology-based services for independent living for older people at home (Draft):
http://is.jrc.ec.europa.eu/pages/EAP/eInclusion/documents/D1_MappingICTindependentlivingv7.0.20140709.pdf
- CARICT Project Summary Report "Can Technology-based Services support Long-term Care Challenges in Home Care? Analysis of Evidence from Social Innovation Good Practices across the EU". <http://ftp.jrc.es/EURdoc/JRC77709.pdf>

DG JUST:

- Soon to be published: an in-depth market study to gather further data of the situation in the EU and its Member States. The preparatory work is addressing accessibility from different perspectives. Improving accessibility of products and services would be of benefit to persons with disabilities, older persons, people with small children, pregnant women as well as other groups with functional limitations whether permanent or temporary.



