SEAS 2 GROW

SILVER ECONOMY ACCELERATING STRATEGIES

MARKET STUDY

Silver Economy Accelerating Strategies (SEAS) 2 Grow

September 2017

www.seas2grow.com

Contents

Disclaimer

This Market Report is a resource intended to stimulate readers when thinking about the Silver Economy market and sub-sectors in each 2 Seas region. It should not be considered comprehensive or as a replacement for independent information-gathering. Readers are advised to refer to the third-party links in the reports for more information and to conduct their own research in addition to reading this report.

Prologue

The Silver Economy encompasses numerous sectors of relevance to elderly people of a wide range of economic, health and social status. It is common across the western world for a fraction of the elderly population to be "retired with resources", i.e. to have a mortgage-free house and disposable income that allows them to enjoy travel, recreation and leisure, and to purchase non-essential desirable products. The aim of the SEAS 2 Grow project, however, is to tackle the challenges of ageing populations which lead to pressure on social and medical services and housing affordability. The project is supporting the development, commercialisation and adoption of innovations that try to solve these issues. This report provides a rich and detailed context for the Silver Economy markets in the 2 Seas regions of Belgium, France, the Netherlands and the UK, which should be of interest to all types of Silver Economy stakeholder, but particularly helpful to suppliers as they consider why, where, when and how to market their innovative products in these countries.

How to read this report

Audience: Although all types of Silver Economy stakeholders will find value in reading this Market Study, it has been written with suppliers of innovation Silver Economy products in mind.

If you are short of time: Read the Executive Summary for a summary of Sections 1, 2, 3 and 4. This will help you identify which parts of the full report are of particular interest to you.

If you have a little more time: After reading the Executive Summary, jump to Section 3 for the regional comparison.

If there is specific information you are after:

- **If you want to understand what the Silver Economy is like** across the 2 Seas region, read Section 1. Alternatively, jump to the individual regional sections on Belgium, France, the Netherlands or the UK.
  Structure = In Section 1, each country is investigated sequentially, beginning with Belgium and finishing with the UK (alphabetic order). Within each country, the development of the Silver Economy is given in chronological order, i.e. from past to current to future Silver Economy descriptions.

- **If you are interested in health and care innovations**, read the regional sections on health and care in Belgium, France, the Netherlands and the UK.
  Structure = In Section 2, each country is investigated sequentially, beginning with Belgium and finishing with the UK (alphabetic order). The first subsector investigated in each of these country-specific sections is health and care. Within each health and care subsection, first the health and care needs of the elderly and informal carers are described, then the health and care ecosystem, and then the top subsector- and country-specific barriers and opportunities for suppliers.

- **If you are interested in food innovations**, read the regional sections on health and care in Belgium, France, the Netherlands and the UK.

Structure = In Section 2, each country is investigated sequentially, beginning with Belgium and finishing with the UK (alphabetic order). The second subsector investigated in each of these country-specific sections is food. Within each food subsection, first the food needs of the elderly and informal carers are described, then the food ecosystem, and then the top barriers and opportunities for suppliers.

- **If you are interested in household and personal equipment innovations**, read the regional sections on household and personal equipment in Belgium, France, the Netherlands and the UK.
  Structure = In Section 2, each country is investigated sequentially, beginning with Belgium and finishing with the UK (alphabetic order). The third and final subsector investigated in each of these country-specific sections is household and personal equipment. Within each household and personal equipment subsection, first the household and personal equipment needs of the elderly and informal carers are described, then the household and personal equipment ecosystem, and then the top barriers and opportunities for suppliers.

Accompanying materials: To gain full benefit from this Study, suppliers are encouraged to consult the following additional SEAS 2 Grow deliverables as well:

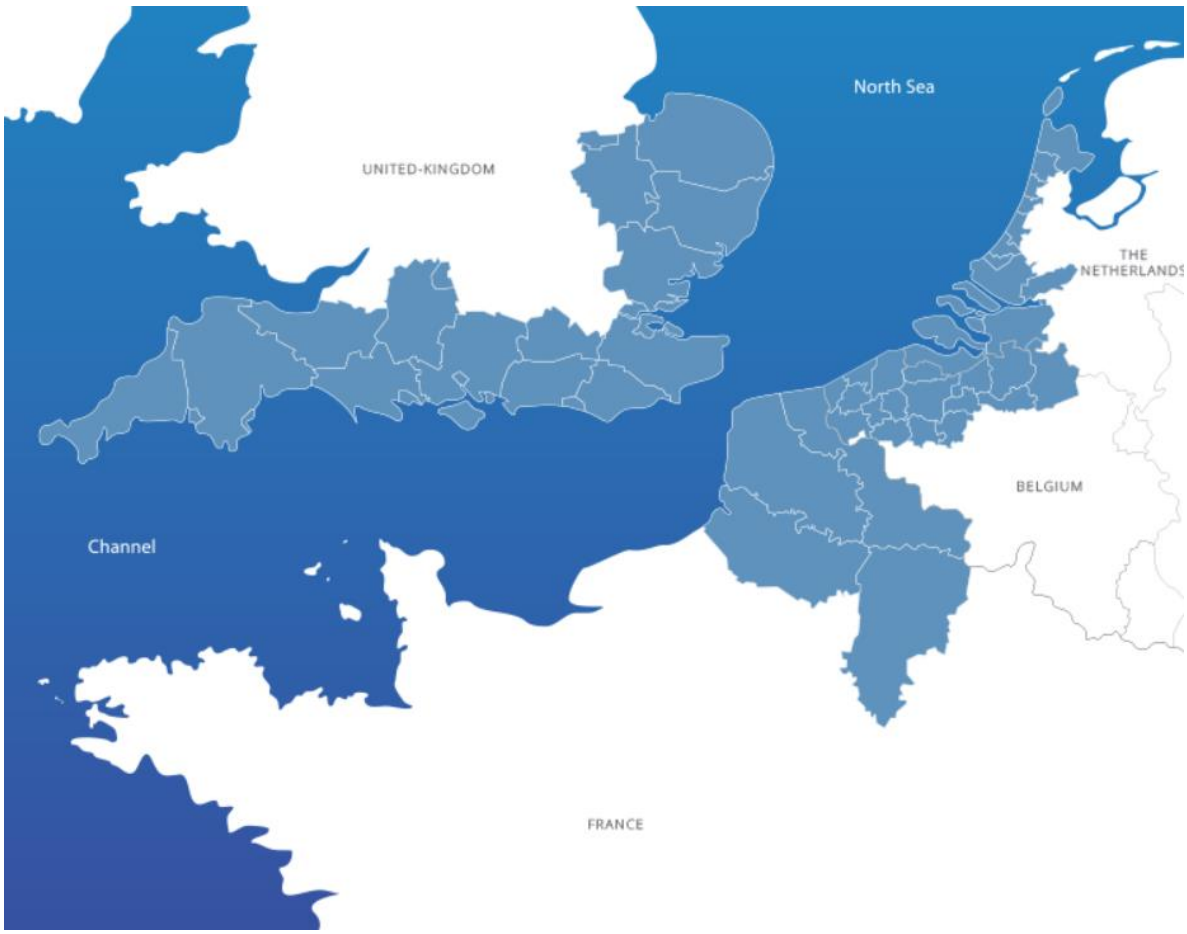
- Silver Economy stakeholder needs analysis: https://www.seas2grow.com/files/
- Regulatory and Route to Market Online Tool: https://www.seas2grow.com/online-tool/
- Map of Silver Economy stakeholders: https://www.seas2grow.com/map/

These deliverables are together informing a Strategic Guide (available from 2018): https://www.seas2grow.com/files/

For more information about these other deliverables, please read Section 4.

Executive Summary

This study is an important output from the EU-funded Silver Economy Accelerating Strategies (SEAS) 2 Grow project. It comprises 4 sections that together aim to inform companies with innovative products for the elderly to consider WHERE, WHEN, WHY and HOW they might market their products in the 2 Seas region spanning Belgium, France, the Netherlands and the UK, which is shown below:



Summary of Section 1. The Silver Economy in Belgium, France, the Netherlands and the UK

Section aim = To help suppliers of innovative products for the elderly understand the past, current and future form, structure and extent of the Silver Economy in each region.

Section purpose = To help supply actors understand which regional Silver Economy's set-up (WHERE) is most compatible with their business capabilities and ambitions, now and in the future (WHEN). To provide signposting to the major resources and structures available to support their endeavors (HOW).

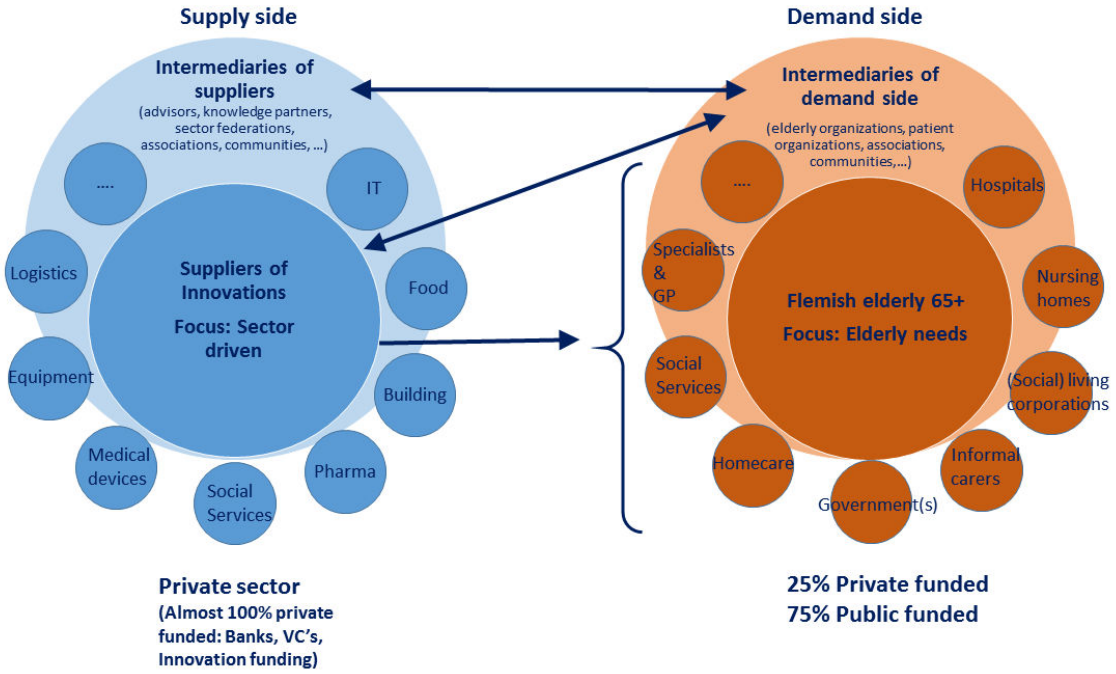
a) Belgium

The Silver Economy in Flanders has strengthened since 2007-2010. Now numerous programs support companies to develop products and services specifically for the elderly or to make a

crossover to this market. These Silver Economy developments have been financed by the financial sector (banks and investors) and by specific governmental programs such as the care innovation program 'Zorginnovatieruimte Vlaanderen' set up by Flanders Care[1] (Flemish government), which has a specific focus on 65+. This program catalyzed the formation of healthcare living labs in Flanders, which are supporting the creation and availability of new products and processes that meet the needs of the elderly. In addition to this, provinces in Flanders[2] have created impulse funding to finance trials of innovations generally.

Aware of the ageing population, various governments (Flemish, regional and local) set out plans and policy for an age-friendly environment and take action to realize these goals. They tend to follow recommendations made by the EU and WHO, but make their own regional plans based on available budgets. The overall policy plan that the Flemish Government follows is the 'Vlaams Ouderenbeleidsplan 2015-2020'[3], under the authority of Flemish minister Jo Vandeurzen.

Summary diagram of Silver Economy in Belgium

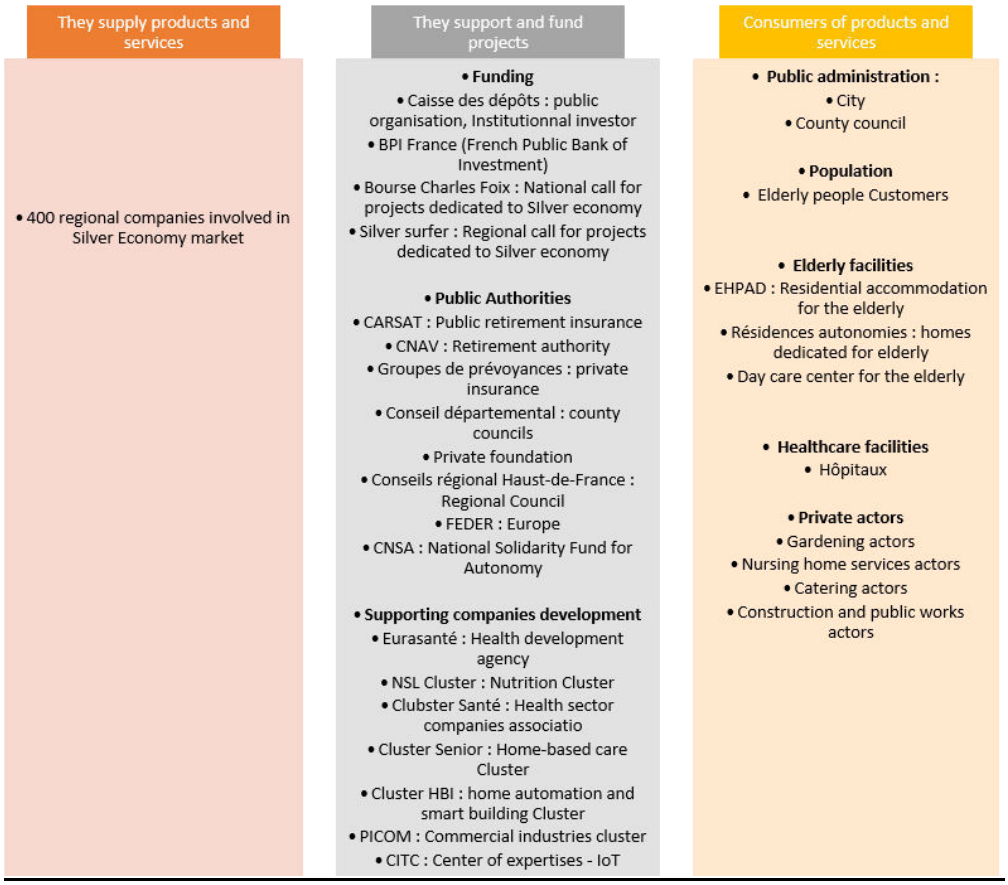


b) France

The Silver Economy in France is a formal and specific economy set up by government ministers to increase and aggregate fields of activities dedicated to adapting and proposing products and services for the elderly population. The creation and development of this sector is a response to the demographic evolution in France. It impacts all sectors of activity - health, food, home, leisure, transport, insurance, etc. Initial indicators suggest that at its full potential, the Silver Economy in France would increase annual GDP by 0.25%.

[1] https://www.flanderscare.be/
[2] https://www.provincieantwerpen.be/provinciebestuur/subsidies.masterdetail.html/p_detail_url/nl/dwep/dienst-welzijn-en-gezondheid/subsidies/subsidie-voor-zorginnovatie---economie-en-arbeidsmarkt.html
[3] https://docs.vlaamsparlement.be/docs/stukken/2016-2017/g1006-1.pdf

Summary diagram of Silver Economy in Northern France

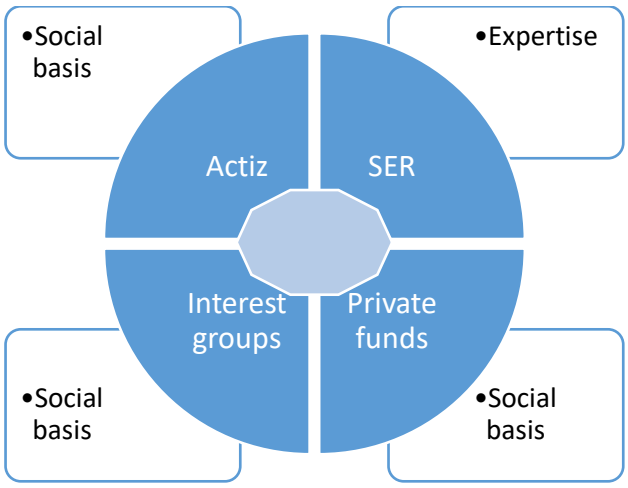


c) The Netherlands

The Netherlands has a tradition of depoliticized consensus-based decision-making. This means that the Dutch way of making policy is based on a self-regulating system - if interests need to be protected, appointed organizations will stand up for those interests. Therefore, the interests of the elderly are covered and protected by different organizations. The government also uses advisory councils composed of academic specialists and/or representatives of stakeholder. The Social and Economic Council of the Netherlands (SER) is particularly influential. Other important stakeholders who represent the elderly specifically and influence national policy and regulation include:

- ANBO
- KBO-PCOB
- 50Plus - a political party that stands up for the elderly
- Omroep Max – a public broadcaster that focuses on the elderly and which has a Foundation that provides support services to the elderly
- ACTIZ industry association of housing, health and care organizations, which provide a key link between society, politics and their membership.

Summary diagram of Silver Economy in The Netherlands

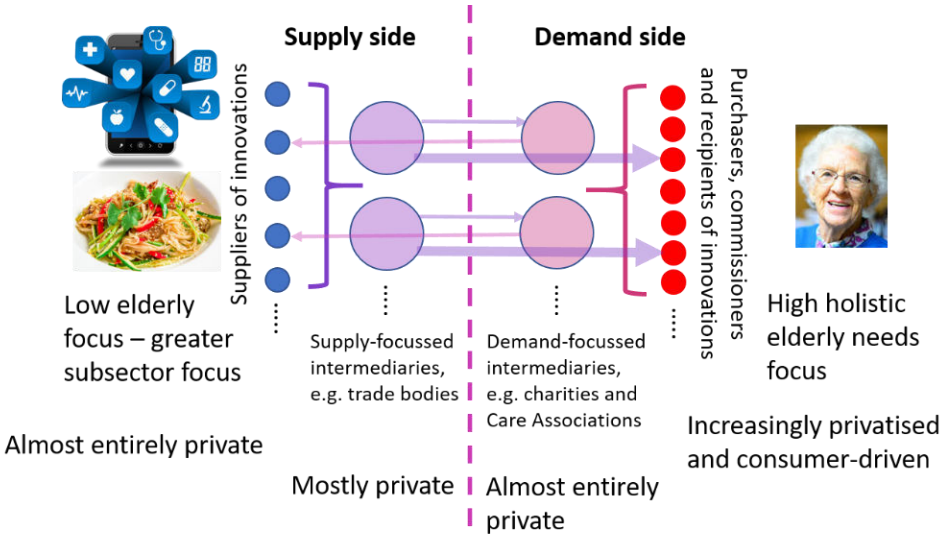


d) The UK

In the UK, a diversified supplier base develops, manufactures and commercialises innovative products for the elderly. These suppliers are supported by a number of largely private, subsector-specific intermediary actors but there are few mechanisms unifying suppliers of innovations specifically for the elderly, i.e. there is low identification with the concept of a Silver Economy supporting the holistic needs of the elderly.

Demand actors are able to voice their holistic needs to (almost exclusively private) demand-side intermediary actors. However, few demand-side intermediary actors proactively engage with the supply side to create immediate and direct "demand pull" for fit-for-purpose and value-adding innovations. This is becoming more challenging as publicly funded services become increasingly privatised, which is fragmenting the Silver Economy demand actor landscape even more.

Summary diagram of Silver Economy in the UK



e) Future plans

Future plans in each region vary according to political and economic requirements. However, each region recognizes the essential requirement to develop support in the most cost-effective way to meet an ever-growing need. It is inevitable that projects and policies should be in place to facilitate better integration and efficiencies between health and social care provision. This may require the intervention of the private sector and some countries, for example moves Belgium, are making this a priority, while others, such as the UK have embraced private sector care providers for many years.

All countries recognize the need to understand more fully and help develop both innovations and markets applied to the elderly, although regions and countries differ in their approach to this with active engagement in the economy in France on the one had for example and a more laissez-faire approach in the UK.

Summary of Section 2. The major Silver Economy subsectors of health and care, food, and household and personal equipment in each region

Section aim = To help suppliers of understand what the subsector-specific needs of the elderly are in each region, and who are the major actors operating there.

Section purpose = To help companies consider the following issues when deciding in which countries to market their products (WHERE):

- the market fit of their products and the significance of the needs they would be addressing (WHY)
- the complexity of the ecosystem into which they would need to integrate (HOW)

a) Subsector needs, ecosystems, opportunities and barriers in Belgium

Health and Care			
Opportunity	Government health goals	Government support for pilot projects	
Barrier	Absence of fees and incentives for remote services	Lack of care sector investment in innovations	Fragmented market

Food			
Opportunity	 Proactive nutritional screening	 New food enrichment products	 Food innovation
Barrier	 Consolidate offer to reduce cost burden	 Tight margins	 Reimbursement limitation
Household and personal equipment			
Opportunity	 Self-monitoring systems	 Codevelop innovations with end-users	 Innovative selling processes
Barrier	 Lack of awareness	 High cost	

b) Subsector needs, ecosystems, opportunities and barriers in France

Health and Care			
Opportunity	 Caregivers with unmet needs	 Necessary expense	 Willingness for independence
Barrier	 Need proven business case	 Fragmented distribution model	 More intense regulations
Food			
Opportunity	 Non-mature market with potential	 Shift to healthy foods	 Rise in demand for food supplements
Barrier	 Stringent regulations	 Difficult marketing	 Innovation roadblocks

Household and personal equipment			
Opportunity	Untapped market	Unaddressed needs	Loyal and faithful customers
Barrier	Low prevention culture	Reimbursement model	

c) Subsector needs, ecosystems, opportunities and barriers in the Netherlands

Health and Care			
Opportunity	Technologically sophisticated target group	Early identification of problem	An innovation incubating culture
Barrier	Competitive marketplace	Need for a compelling proposition	Fragmented market
Food			
Opportunity	Need for healthier eating	Weaning off alcohol	Franchising
Barrier	Right distribution channel	Rigorous food safety	Lots of new competition
Household and personal equipment			
Opportunity	Housing for life	Increasing purchasing power	
Barrier	Lots of competition		

d) Subsector needs, ecosystems, opportunities and barriers in the UK

Health and Care			
Opportunity	Greater consumerism	Outcome based reimbursement	Standard reimbursement for medical technology
Barrier	Spending cuts	Frequent reorganisation	Fragmented market
Food			
Opportunity	Leverage charity reputations	Endorsements	Existing distribution channels
Barrier	Lack of food delivery services	Fragmented market	Financial pressures
Household and personal equipment			
Opportunity	Under-served markets	Partnerships that tackle digital exclusion	Low-cost mobile technologies
Barrier	Competitive online channels	Low digital literacy	Low disposable income

Summary of Section 3. Comparison of Silver Economy structures and major subsectors in each region

Section aim = To highlight the major similarities and differences between form, structure and extent of the Silver Economies and the health and care, food, and household and personal equipment subsectors in the 4 regions.

Section purpose = To help companies make an informed decision about their cross-border commercialization plans (WHY, WHERE, WHEN and HOW).

Main conclusions

The demographic challenges facing the 2 Seas countries are generally common, and therefore theoretically so too are opportunities for companies with innovative products and services.

However, the national and regional context in which companies will have to operate varies widely across the 4 countries, both in their political and commercial landscapes. This means that in reality the opportunities (and barriers) can be very different.

This is particularly apparent in the level to which policy-makers and facilitators across the region support the creation of a distinct "Silver Economy" market that meets the specific needs of this market through age-specific policies and catalysing age-specific products and services, or whether they deem general policies and market access as adequate. The 2 Seas countries span both extremes (notably France in the case of the former, and the UK in the case of the latter).

In this Study, elderly people are defined by age but in life represent a broad spectrum of needs, challenges, wealth, experience, aspirations and intellect. One approach may be to recognise that the 'elderly' of the future are the incredibly broad range of workers and consumers of today with high expectations of product, service and independence. If the private sector can capture this market now, then perhaps it will develop new products and services to meet the needs of its ageing customers and retain their loyalty in later years.

Summary of Section 4. SEAS 2 Grow project scope

Section aim = To describe the current position of the SEAS 2 Grow project and its intentions by 2020 and beyond

Section purpose = To advise companies of the possible ways in which the Silver Economy might develop in the future, which might influence their commercialization plans (WHERE, WHEN and HOW).

This Market Study is one of multiple concurrent SEAS 2 Grow project deliverables that is scoping the Silver Economy ecosystem in the 2 Seas region, increasing recognition of key Silver Economy stakeholders, and helping to inform the tools, methods and services that the Seas 2 Grow Cross-Border Accelerator should provide. The reader is advised to consult the other deliverables to gain full benefit of the insights offered in this Study:

- Silver Economy stakeholder needs analysis: https://www.seas2grow.com/files/
- Regulatory and Route to Market Online Tool: https://www.seas2grow.com/online-tool/
- Map of Silver Economy stakeholders: https://www.seas2grow.com/map/

These deliverables are together informing a Strategic Guide (available from 2018): https://www.seas2grow.com/files/

Companies with innovative products for the elderly may be interested to apply for SEAS 2 Grow Cross-Border Accelerator services: https://www.seas2grow.com/files/

Glossary

Silver Economy	Sector focusing on providing the aged population with products or services that improve their quality of life and support their independence
Innovation	A new or transformative product that has the potential to bring significant improvement to the quality of life and/or independent of an elderly person. For the purposes of the SEAS 2 Grow project, the products of initial interest are limited to: • Health and care • Food • Household and personal equipment
Supply actor	Companies or organisations responsible for developing and/or selling innovations
Demand actor	Individual, company or organisation using, commissioning or purchasing innovations. This should include: • Housing, health and care providers • Local authorities and other local government organisations • Elderly people and their friends and family
Intermediary actor	Individual or organisation supporting the development of the Silver Economy sector, such as regional development agencies, clusters, industry bodies, funders
Health and Care innovations	A new or transformative product that prevents, reduces or slows down deterioration of mental and physical health and health-related wellbeing, or supports the management of existing mental and physical health conditions. In the case of aids supporting activities of daily living, they are considered as Health and Care innovations if they are prescribed and/or funded by a medical or care professional. Examples of subsector innovations: Tools to prevent and manage long term health conditions, aids to support management and rehabilitation after acute health events, tools to support mental health and cognitive impairment, systems for monitoring activities of daily living, including falls and wandering, products to manage incontinence
Food innovations	A new or transformative product that improves nutrition and hydration, including both consumables and tools to assist with food and drink access.

	Examples of subsector innovations: Specialist diet foods and drinks, diet supplements, aids to assist with swallowing (dysphagia), tools to enable remote meal ordering, equipment to support food delivery
Household and Personal Equipment innovations	A new or transformative product purchased privately to support and improve quality of life. In the case of aids supporting activities of daily living, they are considered as Household and Personal Equipment innovations if they were not prescribed and/or funded by a medical or care professional. Examples of subsector innovations: Informal communication tools, e.g. social media, digital skills resources, recreational activities and leisure adaptations, personal transportation equipment, Smart clothing

1) Regional Overview of Silver Economy

a) Belgium

i) History

The creation of a specific policy plan for the elderly came out of the demographic challenges that Flanders is facing. In 2010 Belgium had 1.86 million people aged 65 and over and expected to be 2.2 million by 2020 (+20%). Over the next 10 years, the number of people aged 80+ will grow to 577,000 (compared with 540,000 in 2010).

It is expected by 2020 that 21% of the Flemish population will be 65+.

So that Flemish society can pay for this ageing population, policy makers are encouraging citizens to live independently as long as possible. They are putting in place action plans to support this.

As stipulated in Article 5 of the Decree on the promotion of an inclusive Flemish elderly policy and policy participation of the elderly, each (new) Flemish Government proposes a new Flemish elderly policy plan. The current plan updates the plans from 2007-2010 and 2010-2014. Its aims are to[4]:

			
Ensure every elderly person has access to economic, social and cultural rights	Prevent and reduce age-based discrimination and social exclusion	Enable elderly people to participate in evaluating this policy	Achieve an inclusive, coordinated and coherent policy

ii) Current state

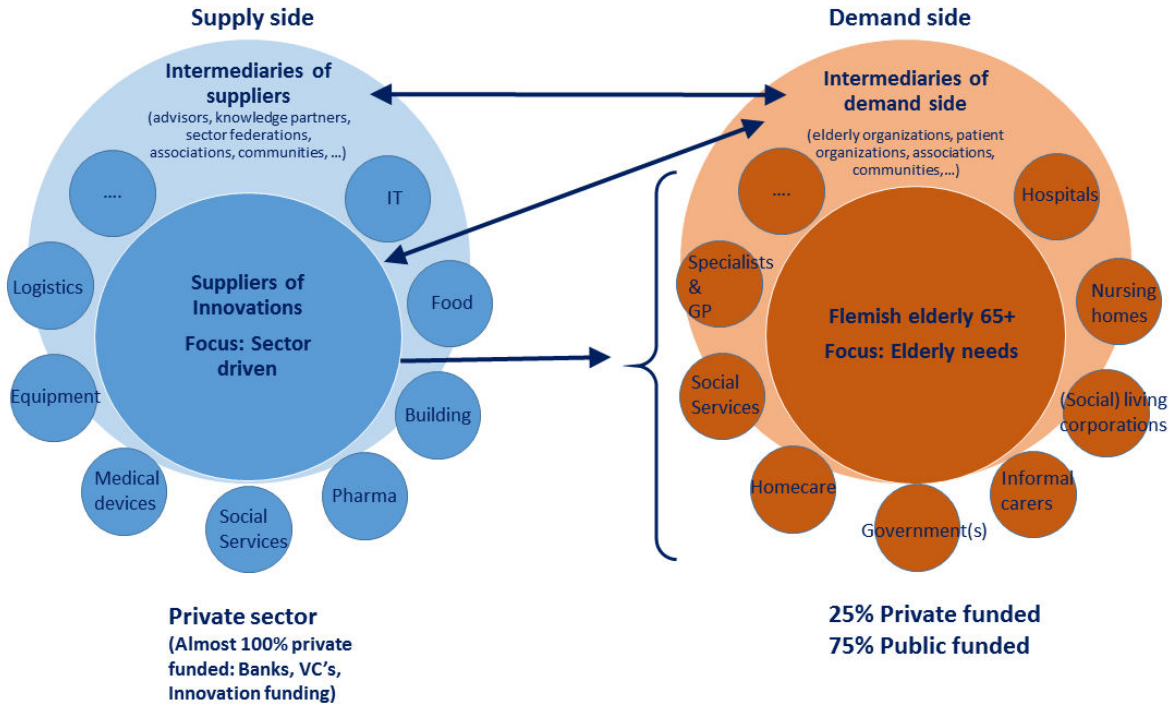
Summary of the Silver Economy in Belgium

The Silver Economy in Flanders has strengthened since 2007-2010. Now numerous programs support companies to develop products and services specifically for the elderly or to make a crossover to this market. These Silver Economy developments have been financed by the financial sector (banks and investors) and by specific governmental programs such as the care innovation program 'Zorginnovatieruimte Vlaanderen' set up by Flanders Care[5] (Flemish government), which has a specific focus on 65+. This program catalyzed the formation of healthcare living labs in Flanders, which are supporting the creation and availability of new products and processes that meet the needs of the elderly. In addition to this, provinces in Flanders[6] have created impulse funding to finance trials of innovations generally.

[4] https://wvg.vlaanderen.be/departementwvg/themas/nl/ouderenbeleid.pdf
[5] https://www.flanderscare.be/
[6] https://www.provincieantwerpen.be/provinciebestuur/subsidies.masterdetail.html/p_detail_url/nl/dwep/dienst-welzijn-en-gezondheid/subsidies/subsidie-voor-zorginnovatie---economie-en-arbeidsmarkt.html

Aware of the ageing population, various governments (Flemish, regional and local) set out plans and policy for an age-friendly environment and take action to realize these goals. They tend to follow recommendations made by the EU and WHO, but make their own regional plans based on available budgets. The overall policy plan that the Flemish Government follows is the 'Vlaams Ouderenbeleidsplan 2015-2020'[7], under the authority of Flemish minister Jo Vandeurzen.

Summary diagram of Silver Economy in Belgium



Demand side

The increasing vitality of older persons and their focus on the quality of their lives increases the prospect of participating in society in later life. The elderly are able to express themselves and realize their wishes and are willing to engage in volunteering in society, participate in travel, political, cultural and sporting activities and, at the very least, many want to take care of their grandchildren and great grandchildren.

An age-friendly Flanders promotes a vision of a society for all ages, where everyone can play an active role in the community and enjoy equal rights and opportunities in all periods of life. This requires various support initiatives and new ways of organizing society which ensure a fair and sustainable future for all generations. Specific to the target population of older people it means, among others, an orientation on the quality of life of the elderly population, active combating of age discrimination and stereotyping, an inclusive labor market, digital inclusion, healthy ageing support, the autonomy of the elderly in all Flemish policy areas and at all levels of policy. The Flemish Government' s Flemish Elderly Policy: 'Vlaams Ouderenbeleidsplan 2015-2020' aims to achieve this. Its basic principles, mission and vision are in line with the priorities and vision of the United Nations

[7] https://docs.vlaamsparlement.be/docs/stukken/2016-2017/g1006-1.pdf

Action Plan (Madrid,18 December 2002) for elderly people. Inspiration for the Plan came from the European Charter for Human Rights and Various Elderly Charters[8].

Flemish Government' s Flemish Elderly Policy: 'Vlaams Ouderenbeleidsplan 2015-2020'
The transfer of new authorities under the Sixth State Reform gives Flanders the opportunity to build strong social protection and an accessible, affordable and quality supply of care and services that further realizes and strengthens the participation and empowerment of the elderly. The plan also activates other policy areas to build an age-friendly Flanders in which elderly people can live independent for as long as possible and actively participate in society.

In consultation with the target group (elderly people and their representative councils) and the relevant policy areas, the Flemish elderly policy plan agreed on the following topics:

- **Prevention** of poor health, including through promotion of physical activity and sports
    - We strive for an offer that (also) appeals to elderly people
    - Sport.Vlaanderen! is a campaign started in 2015 to promote sports for the elderly. The former Sportel campaign is being continued.
    - Local sport facilities and services - From 2016 onwards funds for these facilities and services will be included in the municipal fund. The Flemish Institute for Sport Management and Recreation Policy (ISB) guides a number of local sports services in developing a varied offer for the elderly.
    - Sport Federations - From 2017 there will be a new decree for the sports federations in which they are encouraged to develop a sports offer for each life phase.
    - Elderly associations and (local) service centers - Some elderly associations and service centers offer adapted sports opportunities to their members. Collaboration with local elderly sports clubs are encouraged by (local) policy/governments (municipalities)
    - Sport courses – For example, the Flemish Trainers School offers specific training courses aimed at sporting elderly
    - Policy – The Strategic Structure of Senior Sport aims to achieve cooperation between the relevant top-level (sports) actors to create more opportunities for high-quality sports and participation by the elderly. Members of this strategic structure are: Sport.Vlaanderen!, VSF, ISB, VIGeZ, VUB, OKRA-sport, S-Sport, Flemish agency WVG (welfare, public health and family).

- **Participation**, for example in…
    - Education, media and culture
        - Inclusive media
            - Continue to provide maximum accessibility for persons with sensory disabilities and older people. Media must be compliant with Article 151 of the Media Decree and - for private broadcasters - the resulting implementing decision.

[8] Europees Verdrag tot Bescherming van de Rechten van de Mens en de Fundamentele Vrijheden (Rome, 1950) / Charte des personnes âgées en France (FNG, MES, 1997) / European Charter of the rights and responsabilities of older people in need of long-term care and assistance (AGE, EDE, mei 2010).

There are cooperation agreements with the Flemish regional television broadcasting organizations and the management agreement with the VRT (National Broadcasting network).
    - Television programs are supported to provide voice caption (GO) and audio description (AD) on domestic and foreign television channels.
    - Flemish Audiovisual Fund (VAF): from April 2016 onwards, all VAF's subsidized films are required to provide commentary available via Earcatch, an audio descriptive app
  - Close the digital gap
  - Reform and update the training available for ICT and at centers for adult education
- Longer @ work and workable work
  - The Flemish government wants to increase the labor force of all people in the age group 55-64 to at least 50% by 2020.
  - Since 1 July 2016, a system of target group discounts has come into force which should reduce the wage costs of the 55+ age group
  - Extend the activation approach for jobseekers up to 65 years. Existing tools: Career guidance, career checks and outplacement
  - Focus on talent competence. Reform of Equity Policy on Labour participation (EAD) and Experience Fund
- Policy participation
  - The Flemish Government acknowledges the Flemish elderly council (Vlaamse Ouderenraad) as a representative elderly council for Flanders and establishes its general mission and result areas in a management agreement. The elected members of the elderly council consist of nominated individuals from representative elderly organizations and four experts. It also has a number of members with advisory voice that come from organizations working with or for the elderly. The board is supplemented by a representative of the provincial authorities and one of the local authorities.
  - Relevant partner organizations support local governments or elderly people to develop a locally inclusive elderly policy and to take initiatives that realize or strengthen the involvement of older people in that policy. For this purpose, 90% of the municipalities have a Local Senior Advisory Board. To achieve this, the Flemish Government supports the collaboration of the Flemish elderly council and the association of Flemish Cities and Municipalities (VVSG).
  - The provinces invest in supporting local elderly policies through provincial elderly councils and regional elderly consultation platforms.

- **Housing**
  - Common housing: Solutions and policy recommendations are creating a regulatory framework that supports the effective and smooth development of housing.[9]

[9] https://steunpuntwonen.be/Documenten/Onderzoek_Ad-hoc-opdrachten/ad-hoc-13gemeenschappelijk-wonen-eind.pdf

- Rent premium: The Flemish rent premium is a compensation for tenants in the private rental market with very low income, and who have been waiting for a social housing for 4 years or longer.
- Cohesive social objective: The decree on land and property policy has set the binding social objective for social housing at 50,000 units by 2025. The realizations are monitored through a biennial progress test.
- Social rental offices (SVK): The SVK rent homes in the private rental market in order to rent them in turn to residential households. They 'socialize' a limited part of the private rental market and have a housing supply for households who are unable to rent an affordable, quality house themselves. The SVK pay special attention to the guidance and support of tenants and focus on the most vulnerable households.
- Private rental market: Since July 1, 2014, the Flemish Region has jurisdiction for private rental legislation. An initial evaluation report[10] on the financial aspects (rental guarantee), contractual aspects (duration, termination) and housing quality is available. It investigates what additional incentives (fiscal measures or refurbishment leases) private tenants need to invest in quality rental housing at a reasonable rental price and with sufficient housing security.
- Housing and public space development adhere to good practices and focus on accessibility and "design for all". Age-friendly cities and municipalities, dementia-friendly environments (together with VVSG and King Boudewijn foundation), kangaroo homes, flexible housing (e.g. skilpod), community housing, residential care neighborhoods (Triamant, Niefhout, AIPA) and availability of housing adaptions support lifelong living and help the elderly stay at home as long as possible.

- **Care**
  - For more information, see Section 2a)i).

Intermediary actors:

Elderly organizations:
In Flanders there are several elderly organizations that organize activities for the elderly and empower them in Active Ageing:

- OKRA is the largest one for elderly 55+ (www.okra.be)
- Neos (www.neos.be) is the network of entrepreneurial Elderly people of age 60+
- Fedos vzw is the 'Federation of independent Elderly people'[11]

Flemish elderly council (Vlaamse Ouderenraad)[12]:
In 2004 the decree was approved for the implementation of an elderly policy and the establishment of an advisory board of the elderly for the Flemish Community. The council was founded in September 2005 and is the sole and officially recognized and subsidized advisory board of people aged 60+ age group at Flemish level. It is appointed for a period of five years. In consultation with stakeholders, a management agreement is drawn up for this period. The council's main tasks are to

[10] www.steunpuntwonen.be
[11] http://www.fedos.be/
[12] http://vlaamse-ouderenraad.be/geschiedenis.php

advise the Flemish government, the Flemish Parliament and the strategic advisory councils. Additional assignments are to provide information, to raise awareness about realistic perceptions of older people and aging and their needs and problems, promoting a specific theme during the elderly week, and cooperating in research.

VVSG[13]: The Association of Flemish Cities and Municipalities
This Association is the support centre for and defends the interests of:

- All Flemish municipalities (308)
- All OCMWs = Public centres for welfare (308),
- Almost all police zones (110)
- Waste intercommunales (26)
- Intercommunales for regional development (11)
- Other intercommunal relationships (22)
- Autonomous municipalities or AGBs (53)

vzw Enter: Flemish Expertise Center Accessibility
vzw Enter was established in 2006 and promotes integral accessibility and Universal Design to provide equal opportunities for all, especially for those with disabilities and the elderly. It develops long-lasting expertise and works with expert partners. It is recognized as the Flemish Expertise Center Accessibility by the Minister of Equal Opportunities.

Supply actors:
Companies are grouped in federations for all kind of topics and themes. There is no specific federation for the Silver Economy; they focus not solely on the elderly in their strategic plans.

Programs to support Flemish SMEs generally can be found on www.vlaio.be (SME-innovation-funding, New Industrial Policy).

iii) Future Plans

Trend: slowly accelerating privatization in Belgian health care

10.5% of Gross Domestic Product (GDP) in Belgium is spent on healthcare[14]. Until recently, a legal maximum growth of this cost was set at 4.5% per year above the index increases. Over the past few years, the government has reduced this to 2% in 2012 and 3% in 2013.

Belgium is increasingly following the European Stabilization and Growth Pact to limit growth to structural growth, with particular focus on the health and social security of Belgium. The government started to deliver savings in social security and healthcare from 2012. The savings mainly took place in the pharmaceutical sector and in less reimbursement of medical performances/services. Hospitals have also started to reduce staff costs and find other savings.

Government disinvestment in Belgium is particularly seen in the nursing home sector, which is becoming increasingly privatised as a result. Now one in three nursing homes is a private business,

[13] http://www.vvsg.be/Pages/Home.aspx
[14] FOD Sociale zekerheid

especially in Wallonia and Brussels, but increasingly also in Flanders. Moreover, large groups have been taking over small commercial nursing homes. Large groups such as Senior Living Group, Armonea or Senior Assist each have between 3,000 and 5,000 beds. In addition, large private homes are selling their nursing homes to investors like Cofinimmo and Aedifica. As a result, nursing homes must now pay rent to the new owners of the buildings.

b) France

i) History

The challenges and problems (primarily fiscal and economic e.g. the cost of pensions, care and retirement) posed by the aging population was the seed for the creation of the Silver Economy in France. And yet on closer inspection, population ageing offers many prospects. The Silver Economy market is expected to grow from € 94 billion (2016) to € 130 billion (2020). Moreover, by 2030, one-third of the French population will be over 60 years of age.

The idea was to change how this challenge is viewed. Instead of weighing on our society, these challenges should create a new "sector of activity" around this phenomenon by setting up an entire ecosystem that would foster its emergence.

In 2013, Arnaud Montebourg (Minister of Productive Recovery) and Michèle Delaunay (Minister Delegate for the Elderly and Independent) signed an agreement contract formalizing the creation of the Silver economy. This contract is the result of a committee comprised of professionals of the Silver Economy ecosystem, including companies, professional federations, clusters, ministries, public financiers, and advocates for the elderly.

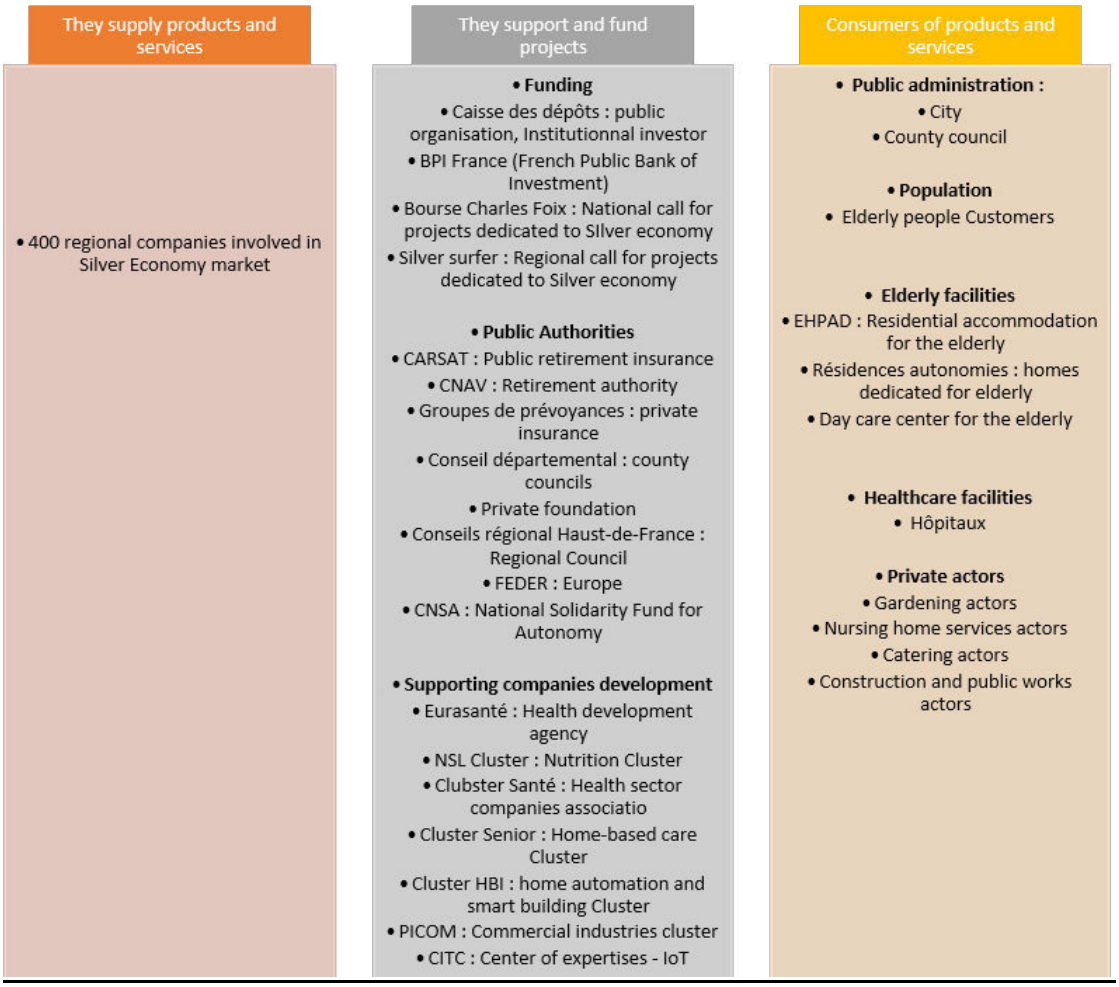
ii) Current state

Summary of Silver Economy in France

The Silver Economy in France is a formal and specific economy set up by government ministers to increase and aggregate fields of activities dedicated to adapting and proposing products and services for the elderly population. The creation and development of this sector is a response to the demographic evolution in France. It impacts all sectors of activity - health, food, home, leisure, transport, insurance, etc. Initial indicators suggest that at its full potential, the Silver Economy in France would increase annual GDP by 0.25%.

France Silver Eco is one of the first platform created to support the development of the Silver economy (http://www.france-silvereco.fr/). It aims to bring together all the actors of the silver economy (supply, demand and intermediate) around a global ecosystem. France Silver eco is also working on the development of regional strategies.

Summary diagram of Silver Economy in Northern France



Headline statistics for the Silver Economy in Hauts-de-France region include:

€5.2 Billion	**1/3**	**9/10**	**300,000**	**2-3X**
Silver economy size. €7.2 billion (2020)	Population over 60 years old (2030)	Elderly people feel best solution is maintaining at home	Silver economy jobs (2013-2020)	Spend of Elderly people with Internet v/s those without

The Silver Economy structure is driven by the public authorities and the contract defines it as "a set of economic and industrial activities that benefit Elderly people", including:

			
Increased social participation	Improved quality and comfort	Reduced loss of autonomy	Increased life expectancy

It is also an industrial and economic opportunity for France by contributing to the:

- Creation of companies and jobs
- Enabling existing companies to increase their turnover
- Consolidating an entire industrial sector

Lastly, the Silver Economy allows significant progress at the societal level by optimizing the efficiency of loss of autonomy management system, strengthening prevention, and ultimately placing the elderly at the heart of our society.

The contract has identified six development axes to the Silver economy structure and make if a true industrial sector:

Axis 1		Creating the conditions for the emergence of a large market in the Silver Economy
Axis 2		Promoting the development of an innovative and competitive offer
Axis 3		Exporting Silver Economy products and technologies
Axis 4		Professionalizing the actors of the Silver Economy
Axis 5		Communicating positively on the elderly and "aging well" with the public and distributors
Axis 6		Creating Major Innovations in the Silver Economy in the Global Innovation Competition

This impetus given by the public authorities made possible the mechanisms that would favor the development of this sector. A few months after its official establishment, the Silver Economy achieved some important first steps:

- Standardization work (AFNOR) and labeling (France Silver eco)
- Specific support for SMEs set up by Business France
- An investment fund to support innovation in the sector
- Integration of the Silver Economy into university curricula

The contract has created regional steering committees that intend to spread the contract's actions locally while taking account of local specificities. Many regions have positioned themselves, including the Hauts-de-France region.

The AFNOR certification "Tested and approved by a panel of Elderly people" implies that the product is fit for use. It is demonstrated at home and analyzed by a team of experts, ergonomists and occupational therapists and finally evaluated against the main criteria for purchase.

Hauts-de-France: a lead Silver Economy region

Since 2016, the Hauts-de-France Silver Economy committee has promoted and coordinated this sector in the region. It also conducts a thorough evaluation of demand. Comprised of clusters and regional authorities involved in the theme, the regional committee values the input from many regional initiatives. It aims to stimulate the realization of innovative products and services for elderly people and its members have implemented several actions to achieve their objectives:

- AgeingFit: The first European Senior care innovation event took place in 2016 with 800 participants. (Organised by Eurasanté, NSL cluster, Clubster Santé, France Silver eco, Eurobiomed)
- HospiHome concept: A connected health approach where several companies in northern France united to create a transversal and innovative offer to improve care and support of the elderly. (Collective innovation initiative supported by Clubster Santé and the University hospital of Lille)
- Silver surfer: A call for projects in digital tools to improve the lives of the elderly. A key highlight is the involvement and integration of end-users in the selection process. (Organised by Eurasanté, M comme Mutuelle)
- Senior Cluster: Specializing in home care product and services, this Cluster gathers companies from the Artois region and aims to offer a range of operational products and services to major contractors (private individuals and housing associations)

Main characteristics of the elderly in the Hauts-de-France region:

- 10% of France’s elderly population (equivalent to the Provence Alpes Cote d’Azur region)
- By 2030, more than ¼ of inhabitants will be elderly (compared to 1/5 at present)
- The median income of the elderly is lower than the national average
- Heterogeneous socio-demographic profile with geographical divisions:
    - Elderly people with modest incomes live in urban areas in the North

- Younger and more affluent elderly people live on the coasts and in much of Picardy

Intermediaries stand together around a common strategy:

In the Hauts-de-France region, 14 structures are involved in the Silver Economy

- La DIRECCTE: Its mission is to foster the development of companies and employment, improve the quality of work and social relations, ensure market loyalty and ensure consumer safety
- Hauts-de-France Regional Council: This Council deals with economic action in its territory
- The Departmental Council of the Nord and the Departmental Council of the Pas de Calais: These councils have the competence to provide social assistance to disabled and elderly people
- La MEL (Métropole Européenne de Lille): This metropolis council deals with economic development in Lille and its surroundings (90 cities)
- Eurasanté: The economic development agency of the biology, health and nutrition sector and in charge of the economic growth of health sector in the region
- NSL cluster: This cluster promotes research and development projects in the fields of food, biotechnology and health
- Clubster Santé: The healthcare network of Hauts-de-France
- Cluster Senior: This cluster brings together a group of companies, mainly SMEs, located in Artois and focused on home-based care
- Cluster HBI: This cluster focuses on construction and excellence in home automation and smart building
- Picom: A commercial industries cluster
- Syndicat Mixte du Montreuillois: This syndicate organizes projects around cities located on the Opal coast
- CARIF-OREF: This organisation supports the development and implementation of public policies in the fields of guidance, training and employment.
- CITC: Center of resources, experiments and technical expertise in the field of the Internet of Things (IoT)

Other intermediaries who do not necessarily have a Silver Economy label but can take part in the development of a product for the elderly include regulatory organisations (AFNOR, HAS for medical devices), organisations involved in labelling (e.g. AFISB Bien vivre pour les salles de bains accessibles - Living well for accessible bathrooms) and organisations involved in the reimbursement of certain products (CEPS - Economic Committee for Health Products, Union nationale des caisses d'assurance maladie - National Union of Health Insurance Funds).

iii) Future plans

Today, an entire ecosystem exists around the Silver Economy and is recognized as a sector in the French economic landscape. Nevertheless, much remains to be done. The sector is young and quite singular: it is not an *ex nihilo* sector that is created, but rather an aggregation of fields of activity around a population.

The Silver Economy also assumes a social role. Besides providing economic and industrial opportunities, it works for greater social participation of Elderly people, an improvement in quality of life and a strengthening of prevention.

Key Challenges

- **Challenge 1: Finding a consensus on the definition**

The Silver economy, a sector built around the elderly, is often contrasted with the concept of the "Senior Market" which encompasses all goods and services (whether dedicated or not) consumed by those over 60 years of age. In summary, one definition is focused on the supply (the Silver economy) and the other on the demand (Senior Market).

In reality, the Silver Economy is rather associated with the loss of autonomy and the maintenance at home, which is of concern to those over 75 years of age (Grands Elderly people) and less than 60/75 years.

- **Challenge 2: Create the conditions for the sector's emergence**

In terms of standards, labeling and regulation, significant work has been undertaken by the AFNOR (French national organization for standardization and its International Organization for Standardization member body). Efforts must be continued to increase its development through funding innovation and support for VSEs and work with European partners to create a real network and promote the export of technologies.

- **Challenge 3: Creating major innovations**

Innovations should be affordable, accepted and ultimately adopted by the target audience. Digital, virtual reality and robotics can drive the creation of major innovations.

- **Challenge 4: Heterogeneity of the elderly**

While the term "elderly" represents people aged 60 and over, there are several profiles within this cohort with a variety of needs and aspirations: from autonomous to dependent people, and from people living at home to those living in institutions. Three major groups in this population are:

1) The boomers: Between 55 and 75 years old. They are the most technophile and expectations are more oriented towards the better life.
2) Elderly people: Between 65 and 75 years old. This is a hybrid age bracket between people at the start of retirement and those with a loss of autonomy. Freer, they want to take full advantage of their life. They have expectations around the best living and begin to have needs to fit their home.
3) Grand Elderly people: Over 75 years old. They are most concerned with new home maintenance technologies. However, they are the least technophile.

c) The Netherlands

i) History

There are three differing views on the historical background of the consensus decision-making (polder model) functioning of the Netherlands:

- Rebuilding of the Netherlands after World War II – Corporatism was an important feature of Christian Democratic, and particularly Catholic, political thought. During the postwar period of reconstruction, various parties (Catholic, Protestant, Christian, social-democratic, and liberal) along with unions and employers' organizations decided to work together. Important institutions of the polder model, like the Social and Economic Council of the Netherlands (SER), were founded in this period. No single political party has ever had anything approaching an overall majority in parliament, so coalition government is inevitable. This is particularly true in present times, when the "death of ideology" has made it possible for parties to work together.
- Dependency on the international economy – The Netherlands is not a self-sufficient economy. Therefore, to protect itself against unpredictable international economy forces, they set up a tri-partite council which oversaw an extensive welfare state.
- Unique geographical aspect – The Netherlands consists in large part of polders (land reclaimed from the sea) which requires constant pumping and maintenance of the dykes. This forced societies living in the same polder to cooperate. Even when different cities in the same polder were at war, they could not avoid cooperation. This is thought to have taught the Dutch to set aside differences for a greater purpose.

Due to this dependency on other stakeholders while making policy, there is a long history of important interest groups and stakeholders - or intermediary actors. Those organizations are important for the interests of the elderly.

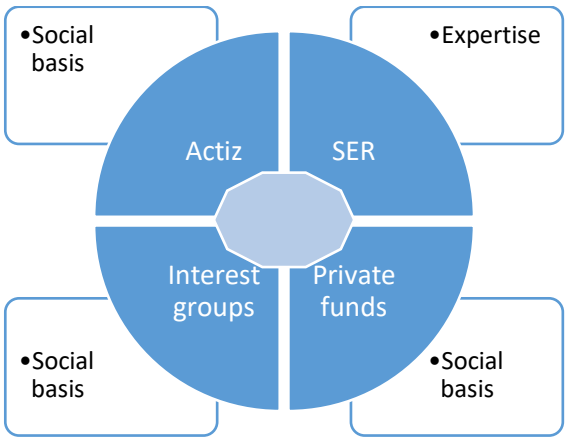
ii) Current state

Summary of Silver Economy in Netherlands

The Netherlands has a tradition of depoliticized consensus-based decision-making. This means that the Dutch way of making policy is based on a self-regulating system - if interests need to be protected, appointed organizations will stand up for those interests. Therefore, the interests of the elderly are covered and protected by different organizations. The government also uses advisory councils composed of academic specialists and/or representatives of stakeholder. The Social and Economic Council of the Netherlands (SER) is particularly influential. Other important stakeholders who represent the elderly specifically and influence national policy and regulation include:

- ANBO
- KBO-PCOB
- 50Plus - a political party that stands up for the elderly
- Omroep Max – a public broadcaster that focuses on the elderly and which has a Foundation that provides support services to the elderly
- ACTIZ industry association of housing, health and care organizations, which provide a key link between society, politics and their membership.

Summary diagram of Silver Economy in The Netherlands



Political parties and Broadcasters

In 1900 the predecessor of the ANBO union was established because the founder wanted a 'union' to fight for a pension for all the workers. In 1977 the Union for Pensions merged with the Union for Elderly and together became the ANBO. Nowadays they stand up for the income, health and housing of the elderly.

Later on, the KBO-PCOB union was founded as two separate unions, on predominantly for Catholics and the other for Protestants. At present, they have united with their focus being 'Elderly people' in the Netherlands in areas such as safety, purchasing power, digitalization, health & wellbeing. Nationwide they have 250,000 members (8% of the target group).

Around 1994 a political party - The AOV - was founded as a protest to the plan to cut costs/budget on housing for the elderly. The party could not satisfy the expectations and ultimately quit politics. Around 2010 a new party started, called 50plus, which is popular today.

Omroep MAX, a public broadcasting organization, produces programs aimed at the elderly. They also have an organized panel and provide counseling between individuals and organizations of government. They have launched a Foundation to stand up for the elderly in (financial) need. With 345,685 members, they are a visible stakeholder for the elderly.

Industry Associations

Established in 2010, ACTIZ is an industry association whose membership comprises different care organizations, housing organizations and the organizations who work in health care. They are the first to see the outcomes of the policy of municipalities, homecare organizations, national regulations etc. As they are the key link between politics, society and their members, ACTIZ could be an interesting partner to innovators.

Apart from these organizations, municipalities have a huge role to play in policymaking. All municipalities are united in the Association of Netherlands Municipalities (VNG). This Association was founded in 1912 and is a huge influencer on the Dutch national legislation concerning the Social

Support Act. Nowadays the government communicates new relevant policies and regulations to the Association's 388 members.

Events

The abolishment of ZZPs in 2015 (ZZP: degree of amount of care; 1 indicates not that much, up to 6 indicates a lot of care) made it more difficult for the elderly to receive public-funded housing. The new manner in which care in the Netherlands is organized makes it more difficult and complex for suppliers to find a route to market.

The structure for innovators and new businesses is particularly complex if the business is interested in being funded by the government. Finding the right direction depends on many factors, such as target group, who is paying for it, who profits the most, is their sufficient evidence, type of product and most important: what law applies? Answers to these questions will guide the business to a possible (state-funded) purchaser.

The key to success in the Netherlands is to build strong relationships with Dutch institutions or organizations. Convincing key interest groups will lead to good awareness and reputation across society and thus effective distribution channels and contact with essential and reliable contacts. The private purchasing market is much easier to enter. More information about directions concerning innovations in the e-health care in the Netherlands is available at http://www.innovatieroutesindezorg.nl/Home/.

Listed below are the important actors who trigger the demand for products or services and support the Silver Economy.

Intermediary actors

Important information about exporting and importing (care-related) innovations are described at http://www.zorgvoorinnoveren.nl/fileadmin/zvi/documenten/InternationalizationGUIDE_ZVI.pdf.

- **Kamer van Koophandel (Chamber of Commerce)**

  This institution advises Dutch organizations about the possibilities for exporting and importing goods and services. They also support organizations with education, webinars, fairs and a network and hold the business register. In the Netherlands, registration in the business register is compulsory for every company and almost every legal entity. https://www.kvk.nl/english/

- **Zorg voor innoveren (Care for Innovation)**

  This initiative is a co-creation among different organizations - Ministry of health, welfare and sports, ZonMw, National Health Care Institution (Zorginstituut Nederland) and the Dutch Healthcare Authority (NZA). Their goal is to be the signpost in the Netherlands for care innovators. This co-creation is important for new innovators in the Netherlands, because they can supply a lot of information and a wide network of partners and possible joint ventures. More specific information can be found at http://www.zorgvoorinnoveren.nl/international/.

  This short movie presents possible ways to enter the care market in the Netherlands. http://bit.ly/2t5kg7h

- **Douane (Customs)**

  Depending on the type of innovation and the location of its production, it may be important to consult customs. Their website provides lots of information about relevant laws and regulations and taxes concerning doing business in the Netherlands. https://www.belastingdienst.nl/wps/wcm/connect/bldcontenten/belastingdienst/individuals/individuals

- **Rijksdienst voor Ondernemen (Netherlands Enterprises Agency)**

  This institution was established by the government to focus on innovations and businesses. Their goal is to encourage entrepreneurs to run sustainable, agrarian, innovative and international businesses. They provide information about subsidies and grants and how to get a patent on these innovations. http://english.rvo.nl/

Besides the general information about exporting and importing, it is important to understand the culture and way of doing business in the Netherlands.

iii) Future plans

Waardig ouder worden (getting older with dignity) is a Dutch initiative with a key goal to improve the lives of the elderly and prevent them from feeling that their lives are over. This manifest is the outcome from a discussion about *voltooid leven* / a completed life, which was instigated by a political party (D66). Their rationale was that living your life is a right, not a duty. They plead for the possibility of older adults to end their life when they genuinely feel that it is complete and want to prevent physically, socially and emotionally decay. The political party aims to turn the initiative into a law applicable for citizen 75 years and above only.

In reaction to this initiative, another political party, Christian Union (CU), announced a manifest in cooperation with Omroep Max (broadcasting corporation) and KBO-PCOB (organisation for the elderly). Their main goal it to prevent citizens from feeling decayed by organizing society in such a way that older adults feel to be of value. This will prevent elderly people from feeling that life is not worth living any more. The manifest consists of 10 proposals to improve the position of older adults. The first recommendation is to assign a ministry for the Silver Economy. Furthermore, they call for greater investment in: informal carers, social meeting places for older adults, more prevention of elderly people from getting lonely, creating more possibilities for young adults to do voluntary work involving elderly people, and individualized care and palliative care.

Negotiations for a new government are currently taking place. Both parties who are involved in the discussion about this issue of older adults are negotiating on a new coalition. This means that there is a possibility that the manifest could become government policy and a specific ministry put in place. If this were to happen, thus could create momentum for a dedicated Silver Economy structure in the Netherlands.

d) The UK

i) History

In the UK, interest in the empowerment, wellbeing and independence of the elderly has generally been subsumed in the general categories of "health care" and "social care". There have been few examples of initiatives to support other aspects of elderly wellbeing, and few mechanisms giving a voice to the elderly, e.g. specialist political interest groups.

The major milestones in the UK's health and care evolution were:

- 19th century - Second World War: Poor Law required parishes (small territorial divisions) to raise funds by local taxation to provide health services to underprivileged individuals without family support. Free out-patient and hospital health care for frail poor people was established in London and other large cities. Social care was mainly provided by voluntary charitable organisations and local authorities at a charge for all those who could afford it.
- 1930s: Implementation of the Local Government Act (1939), which transferred most health and social care responsibilities to local authorities (LAs). Geriatric medicine expanded, in particular focused on rehabilitation and reduction in acute bed occupancy, however older and disabled individuals were still poorly regarded.
- 1946: National Assistance Act required LAs to provide residential accommodation and community social services for older people in need, for which means-tested charges could be placed.
- 1948: Establishment of the National Health Service (NHS) of "free at the point of delivery" health services.
- 1950s: Poor conditions in hospitals and residential homes gain political attention, leading to shift from institutional to community care
- 1968: Health Services and Public Health Act expands social service responsibilities of LA
- 1980s: Acceleration towards community-based and LA-managed care (white papers *Growing Older*, 1981, and *Caring for People*, 1989), which culminated in the National Health Service and Community Care Act (1990) that permanently established LA as "purchasing" (i.e., demand) actors, rather than "providing" (i.e., supply) actors only.
- 1990s: Public funding cuts motivated a further shift from public to independent sector (voluntary, private) care provision.
- 2000s: Social care increasingly provided by the independent (in particular private) sector, with funding coming from the individuals themselves or from LA in the case of the most disadvantaged individuals.

- 2010s: Recent measures and policies (Care Act 2014[15], NHS Five Year Forward View[16], Sustainability and Transformation Plans[17]) together with additional budget constraints have further incentivised private sector provision of health and social care in the community.

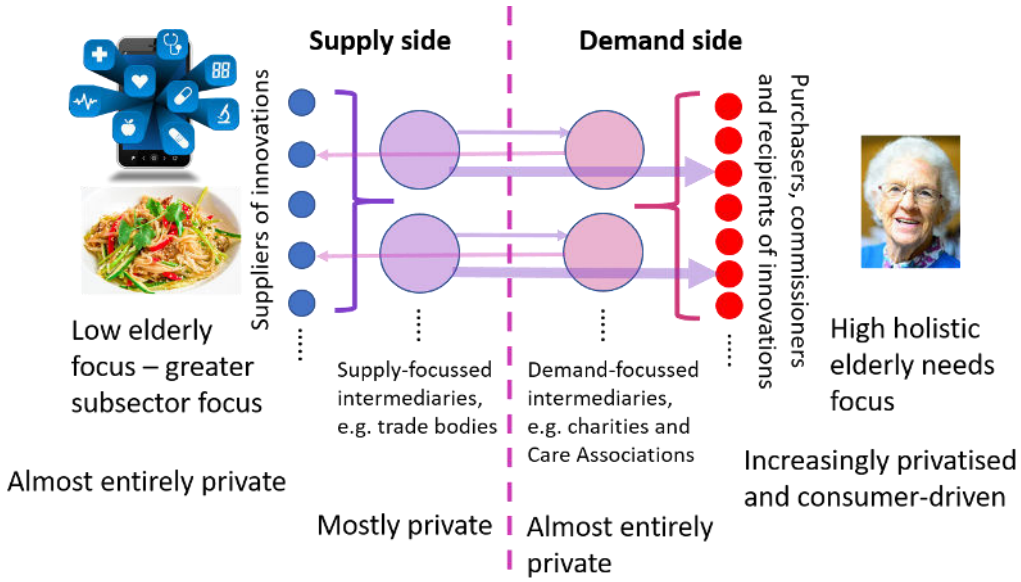
ii) Current state

Summary of Silver Economy in UK

In the UK, a diversified supplier base develops, manufactures and commercialises innovative products for the elderly. These suppliers are supported by a number of largely private, subsector-specific intermediary actors but there are few mechanisms unifying suppliers of innovations specifically for the elderly, i.e. there is low identification with the concept of a Silver Economy supporting the holistic needs of the elderly.

Demand actors are able to voice their holistic needs to (almost exclusively private) demand-side intermediary actors. However, few demand-side intermediary actors proactively engage with the supply side to create immediate and direct "demand pull" for fit-for-purpose and value-adding innovations. This is becoming more challenging as publicly funded services become increasingly privatised, which is fragmenting the Silver Economy demand actor landscape even more.

Summary diagram of Silver Economy in the UK



[15] Care Act 2014 – Chapter 23, 2014, http://www.legislation.gov.uk/ukpga/2014/23/pdfs/ukpga_20140023_en.pdf
[16] NHS, Five Year Forward View, October 2014, https://www.england.nhs.uk/wp-content/uploads/2014/10/5yfv-web.pdf
[17] NHS England and NHS Improvement, NHS Operational Planning and Contracting Guidance 2017-2019, December 2015, https://www.england.nhs.uk/wp-content/uploads/2016/09/NHS-operational-planning-guidance-201617-201819.pdf

Demand side

Approximately 17.8% of the UK population is aged 65+ (a 26% increase over the past 40 years) and this is expected to reach approximately 25% by 2045[18]. The major factor driving this ageing population is improvement in health and social care for the elderly.

Public health and care services remain the most influential determinants of elderly empowerment, wellbeing and independence in the UK. Patients (**demand actors**) are given a voice to influence their local public health (NHS) services through a network of 152 local Healthwatch organisations. However, there are few opportunities for the elderly to influence public care services.

The most significant group of **demand-side intermediaries** with dedicated focus on the elderly are (independent) **charities** such as Age UK, Independent Age and SAGA. They perform several roles such as supplying health and care products and services, providing information to the elderly, funding, networking, supporting informal carers and advocacy in matters related to old age. A few charities specialise in providing advice (often online) on products and services targeting older individuals, such as the Research Institute for Consumer Affairs (RICA) and the Disabled Living Foundation (responsible for maintaining the Living Made Easy portal on independent living). Other major charities of relevance to the Silver Economy are those that support informal carers, such as Carers UK and Crossroads.

Age UK is arguably the organisation with greatest influence on age-related national conscience and policy. In 2017, they published legislation briefings[19] describing the policy issues of particular relevance to the Silver Economy. These issues include financial and digital exclusion, frauds and scams, health and care, hospital discharge, adapted and supported housing, transportation services and infrastructure, and disability and the build environment.

In 2008, a report was published that reviewed opportunities for older people to increase their engagement with public institutions at all levels[20]. This report lead to several **Regional Forums on Ageing** being set up to promote education, debate and advocacy around the societal implications of the ageing population. The Forums in the 2 Seas region include the Forum for Ageing in the East of England (Future East), the South East England Forum on Ageing (SEEFA) and the South West Forum on Ageing (SWFoA).

Despite the influence of the national charities and Regional Forums on Ageing, there is limited "demand pull" for fit-for-purpose and value-adding innovations. The opportunity for unified "demand pull" is becoming more challenging as the UK political system becomes increasingly devolved[21] and public services increasingly privatised. This is because it is causing the Silver Economy demand actor landscape of **housing, health and care providers, local authorities and private**

[18] Office of National Statistics, Overview of the UK population, March 2017
[19] Age UK, Briefings – Legislation and inquiry submissions, June 2017, http://www.ageuk.org.uk/professional-resources-home/public-affairs/briefings/legislation/
[20] John Elbourne, Review of Older People's Engagement with Government, November 2008, http://webarchive.nationalarchives.gov.uk/20130128102031/http://dwp.gov.uk/docs/john-elbourne-181108.pdf
[21] There are currently 201 district councils, 55 unitary authority councils, 36 metropolitan borough councils and 32 London borough councils in England alone, each of which with significant responsibilities for delivery of social care, and with prospective future responsibilities in the planning and delivery of health care in the context of the NHS STPs

purchasers (elderly people and their informal carers) to fragment further and become more consumer-driven.

Supply side

A highly fragmented but more consumerist customer base is requiring Silver Economy **supply actors** (mostly private for-profit companies) to find new routes to market with new value propositions. These changes to business model can create great opportunities for supply actors (e.g. by reducing the monopoly of incumbent suppliers with high-volume Preferred Supplier contracts).

There are a wide range of **supply-side intermediary actors** who can help suppliers to navigate these commercial challenges. **Public** intermediaries of interest to suppliers include the NHS's Academic Health Science Networks and Innovate UK (the UK's innovation agency). Although these organisations may have sub-groups interested in innovations for the elderly specifically, they generally serve the interests of multiple or all demographics.

Overall, most supply-side intermediary actors are **private** organisations, such as the British Healthcare Trades Association and the National Care Association trade bodies, and the MedilinkUK networks. The most influential of these are subsector-focussed rather than elderly-focussed, i.e. they have a special interest for health products or foods, not the elderly, for example. Research did not find any high-profile supply-side intermediary actors dedicated to innovations for the elderly. This is reflected in the profile of **suppliers**, as there are few who attach themselves exclusively to the elderly rather than to a specific subsector (e.g. health).

Nevertheless, there is high awareness of demand-side intermediaries such as Age UK. This is enabling the supply side to access the demand side for inspiration, validation and testing of innovations, i.e. "supply push".

There is no major public initiative encouraging and supporting import of innovations for the elderly or locating of Silver Economy innovators in the UK specifically. However, the Department for International Trade (DIT) is the public organisation providing these services to all subsectors of innovations. DIT claims that the UK attracts more European businesses than any other national because it offers:

- people with the talent and right skills
- a simple and competitive tax rate system
- a transparent regulatory system making it easier to do business

Suppliers are therefore advised to consult the DIT website for more information about exporting to the UK (either directly or via distributors) and locating a business in the UK.

iii) Future plans

The sustainability of the UK's public health and care services will continue to be under increasing pressure as the number of elderly people grows by 5.6 million in the next 20 years[22]. This will result

[22] Office for National Statistics, Overview of the UK population: March 2017, March 2017, https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/articles/overviewoftheukpopulation/mar2017/pdf

in incredible pressure on informal unpaid carers with expected negative effects to the quality of care provided, carer health and wellbeing, and the total economy[23].

A number of initiatives are being proposed to improve this situation for all groups of UK society (not just for the benefit of the elderly). Possibly the most significant are the NHS Sustainability and Transformation Plans (STPs), which aim to bring together formerly siloed health and care providers and other support services to provide more sustainable and holistic services. Elderly people are arguably the demographic group who could benefit most from a more holistic support system. Unfortunately, implementation of this new system faces great challenges[24].

Even though the future of health and social care in the UK is today uncertain, other aspects of the future Silver Economy are clearer. In a recent report[25], the UK Government Office for Science (GOS) shared its views on the implications of the ageing population. Of particular relevance to Silver Economy actors, the GOS identify the following priorities

- Longer working lives
- Lifelong learning
- Adapted and 'right-sized' housing and neighbourhoods
- Family interactions
- Health and care systems responsive to changes in demand
- Informal and unpaid care
- Appropriate transportation and mobility options
- Improved connectivity
- Technological innovation

Unfortunately, there are few examples of materials or activities that either recognises the potential or promotes the future UK Silver Economy. A notable exception is the think-tank International Longevity Centre UK (ILC-UK), who in a recent report[26] identify the following desirable future direction:

- a more integrated health and social care systems
- self-funded health and care products ("the silver point is likely to grow as the baby boomers enter their twilight years")
- longer working lives
- adapted smart housing.

[23] Ben Franklin, The end of formal adult social care: A provocation by the ILC-UK, Age UK, Centre for Later Life Funding and International Longevity Centre, December 2015, http://www.ilcuk.org.uk/images/uploads/publication-pdfs/The_end_of_formal_social_care_1.pdf

[24] Chris Ham, Hugh Alderwick, Phoebe Dunn, Helen McKenna, Delivering sustainability and transformation plans: From ambitious proposals to credible plans, The King's Fund, February 2017, https://www.kingsfund.org.uk/sites/files/kf/field/field_publication_file/STPs_proposals_to_plans_Kings_Fund_Feb_2017_0.pdf

[25] Government Office for Science, Future of an Ageing Population, July 2016, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/535187/gs-16-10-future-of-an-ageing-population.pdf

[26] International Longevity Centre (ILC-UK), Tomorrow's World: The Future of Ageing in the UK, February 2016, http://www.ilcuk.org.uk/images/uploads/publication-pdfs/Tomorrows_World_-_The_Future_of_Ageing_in_the_UK.pdf

e) Analysis of the regional future plans

Across Europe, future support for the elderly has to take place in the context of public-sector funding constraints. Countries are approaching the challenges in a variety of ways to ensure than health and care needs of the elderly are met as efficiently and effectively as possible.

In the UK, future health and care needs are being pioneered by the creation of regional 'Sustainability and Transformation Plans' (STPs) which will attempt to integrate health and care services more efficiently. There is no overt demarcation of the Silver economy by the treasury and usual markets are expected to accommodate needs of the elderly. However, there are on occasion public sector funded competitions to enable the development of innovative products and services for use specifically in elderly populations e.g. solutions for dementia.

In the Netherlands, there is considerable debate about the rights of elderly people, alongside manifesto development to improve the lives of elderly people by greater investment in the informal carer system. There is also a move to develop a structure to encourage the Silver Economy.

In France there is clear recognition of the Silver Economy as a sector and in future, this will become more clearly defined, including the granularity of its target market. There is also likely to be better conditions created to develop and foster innovations specifically for this developing market.

In Belgium, there is a clear recognition for increasing private sector engagement in health and care provision which will lead to more private sector funded care and nursing homes and consolidation of this sector through the purchase of smaller businesses by larger concerns.

2) Major Silver Economy Subsectors

a) Belgium

i) Health and Care

(1) Needs of the elderly and their informal carers

Figures[27] extracted from the Belgian Ageing studies (http://www.belgianageingstudies.be/) show the degree of care demand from Flemish people aged 60+:

1		Health condition	Health limiting participation in the following activities: lifting objects (58.6%), bending (42.7%), take stairs (41.1%), household (22.1%)
2		Prevalence of falls	Fall frequency during the past 12 months: 0 times (72.5%), 1 time (14.9%), 2 times (3.7%)
3		Vision/ visual disturbances	No problems (42.9%), poor vision and no glasses (9.5%), poor vision and glasses (47.6%)

[27] Ouderenbehoefteonderzoek Vlaanderen (cijfers van 2016)

4		Hearing/ hearing impairment	No problems (70%), bad hearing and no hearing aid (15%), hearing impairment and hearing aid (15%)
5		Memory complaints	12.7% (Antwerp region only)
6		Third-party help	Can you depend on someone? No-body (1.9%), family (62.9% partner / 51.3% daughter or son / 31.5% grandchild), friends (39.6%)
7		Care Dependency	Personal care needed (11.2%), household help needed (24.7%), help with mobility needed (21.6%) • Number of hours of care assistance needed: 6.9 hours per week • Which persons do they receive care from? children (60.5%), partner (42.2%), GP (34.7%), grandchildren (30.4%) • Which organizations do they get care of? Cleaning service (34.8%), home nursing (25.3%), family care service (14.5%)
8		Where are they going for information regarding services / financial compensation	Children (59.7%), General Practitioner (58.3%), grandchildren (15.9%)

Chronic diseases:

The Belgian Health Survey 2013[28] gives an overview of the number of chronic conditions that Belgian people aged 65+ suffer from:

- More than 1 in 3 people over 65 years of age have at least two major chronic conditions (multi-morbidity): 34% (65-74); 37% (75+)
- Almost half (48.8%) of people aged 75-plus have a chronic health condition. People with a lower level of education have higher chances of chronic disease.
- Most common conditions in people aged 65+ are (men / women):
    - High blood pressure (35.5% / 38%)
    - High cholesterol (31.9% / 38.2%)
    - Osteoarthritis (28.4% / 49.8%)
    - Lower back pain problems (27.5% / 34.2%)

[28] Gezondheidsenquête 2013: Rapport 1: gezondheid en Welzijn: https://his.wiv-isp.be/nl/Gedeelde%20%20documenten/summ_HS_NL_2013.pdf

- High blood pressure (prevalence rate increased 6% since 1997) is the main factor for cardiovascular disease. 94.3% of the Belgian elderly are monitored for this.
- Diabetes: Prevalence has doubled since 1997: 14.6% for men and 12.4% for women

Avoidable mortality:

Avoidable mortality[29] is caused by deaths that could be avoided by primary prevention and a perfectly organized healthcare (e.g. vaccination, early detection or appropriate treatment). Nearly 2 out of 5 deaths of people aged 75+ could theoretically have been avoided one way or another.

- For men, 37% of deaths are avoidable by primary prevention (mainly due to lung cancer and ischemic heart disease)
- For women, 41% of deaths are avoidable - largely due to deaths that are strongly related with the quality of health care (e.g. breast cancer).

Mental Health:

The results of the health survey 2016[30] indicate that 32% of people aged 15 years and older have psychological distress, with a little more than half of these individuals (18% of the total) having a relatively serious mental disorder, 15% having depressive feelings, 8% having an eating disorder, 10% having an anxiety disorder and 30% having a sleeping problems. Furthermore, 14% of the population have thought about suicide and 4.2% have tried to commit suicide.

(2) Ecosystem

Demand actors

1. **Public Health care service:**
   Health care in Belgium is the responsibility of the federal government (federal department of health, food safety and environment [31]) and the federated entities (Flemish agency of Care and Health[32]).

   Social security[33]
   Today, the vast majority of the Belgian population have access to **healthcare**. To make use of the available medical services, the citizen must meet certain conditions and take the necessary steps to complete health insurance (ZVZ). This is a mandatory arrangement whereby employees and self-employed workers contribute to the financing of health care. Social security and health care are constantly evolving to ensure quality care for anyone with

[29] figures out of report 'Vlaamse regionale Indicatoren 2016' of Flemish Government): https://www.vlaanderen.be/nl/publicaties/detail/vrind-2016-vlaamse-regionale-indicatoren

[30] https://his.wiv-isp.be/nl/Gedeelde%20%20documenten/summ_HS_NL_2013.pdf
[31] https://www.health.belgium.be/nl/gezondheid
[32] https://www.zorg-en-gezondheid.be/
[33] https://www.belgium.be/nl/gezondheid/gezondheidszorg/medische_diensten/organisatie_van_de_gezondheidszorg

a health problem. The nationally established fee schedule describes more than 8,000 services that are covered by this compulsory health insurance - if a service is not listed on this schedule, reimbursement is not possible.

The Flemish agency also manages the Flemish **Care** Insurance Scheme (Vlaamse Zorgverzekering[34]) - a compulsory insurance scheme for everybody who lives in Flanders and is above 25 years (since October 2001). This insurance provides partial or full coverage to those who need non-medical care services from professional care providers or informal carers. It can be considered a (regional) addition to the (federal) health insurance. It pays an allowance to people who have a significantly decreased ability to determine the care they receive (residential treatment, partial residential treatment or treatment at home) and pay for it using this allowance.

The reimbursement of care provided by residential care, sheltered home or in a psychiatric care centers and involving medical acts (like nursing and physiotherapy) is currently carried out by NIHDI (RIZIV), federated authorities and the sickness funds, and is granted to these centers through a third-payer scheme. This funding, among other things, takes into account the number of staff needed to meet the needs of the clients. In care for elderly, the funding is explicitly linked to their care dependency level (assessed by BelRAI Screener for residential care). Individuals not eligible for state funding must use the personal financing system ('persoonsvolgende financiering'), which may mean they pay some or all of their care costs.

Flemish Social Protection also provides compensation for assistance for elderly people (THAB), a basic support budget for people with disabilities (PDOs), and reimbursement of mobility aids such as wheelchairs, scooters, etc. Communities and regions finance services like family aid, delivery of meals etc.

Flanders' Care (policy advisor on innovation in care)

The Flemish government approved the action plan **Flanders Care 2.0** on February 5, 2016. This is a plan covers the policy areas of 'Welfare, Public Health and Family', 'Innovation', 'Economy', 'International Flanders' and 'Finance'. The plan focuses on achieving synergy between the companies, care organizations and knowledge centers within a rapidly evolving social, economic, technological, health and well-being environment. Among other things, the breakthrough of artificial intelligence, robotics, and new organizational forms in the healthcare sector and health in all policies are of interest. The following areas are priorities in the plan: Data sharing; M-health; Assistive technology and medical devices; Chronic care models; New collaboration and business models; Provide talent; Internationalization; Attention to ethical challenges.

2. **Health insurance organizations**

   The mandatory contributions and other relevant benefits are monitored and organized by the National Institute for Disease and Disability Insurance NIHDI (RIZIV[35]) through the various sickness funds. CM, De Voorzorg, MOLZ, Liberale mutualiteit and LNZ are the 5 (groups of) funds in Flanders.

[34] http://www.jovandeurzen.be/sites/jvandeurzen/files/conceptnota%20VSB_0.pdf
[35] http://www.riziv.fgov.be/nl/professionals/Paginas/default.aspx#.WVX2BUk0NPY

3. **Health care professionals:**
   When an individual is ill, they consult their general practitioner (or treating physician), who is in charge of **primary care**. In some cases, they will be referred to a specialist who will have his / her own practice in a group practice or at the hospital (**secondary care**). In rare cases, they will be helped by a medical emergency service. Other primary care professionals are: home care nurses, physiotherapists, occupational therapists, dentists, pharmacists etc. **Tertiary care** can be delivered by specialised intramural care facilities like psychiatric hospitals.

   - Hospitals: divided into general hospitals and psychiatric hospitals. In 2014 the number of beds[36] available in Flemish general hospitals was 4.8/1,000 and in psychiatric hospitals it is 1.6/1,000. On a federal level, there is a global budget[37] of €6.4 billion for general hospitals and €1.2 billion for psychiatric hospitals.
   - Residential care for elderly: divided in 3 groups: public financed (OCMW, public centres for social welfare), private financed or non-profit (VZW). The number[38] of nursing home beds (WZC=woonzorgcentra) and assisted living flats (service flats) is 7.7 for every 100 people aged 65+.

   All health workers are checked by the federal government to provide the best care. For example, hospitals have to comply with strict standards that require them to: provide quality care, ensure efficient access to emergency services and ensure access to scheduled care (surgical procedures, medical examinations, observations).

4. **Informal care (non-professional caregivers):**
   Informal care for elderly living@home has become an indispensable part of care in Belgium and is delivered by volunteers, family-members and neighbours. A UCL study[39] in 2016 commissioned by the King Baudouin Foundation showed that the average economic value of informal care varied between €267 and €1,194 per month. Some findings include:

   - There are more non-resident than resident caregivers (6 out of 10 do not live with the elderly) and are mainly women (71%)
   - Resident caregivers are mainly partners (73%) and children (23%)
   - Non-resident caregivers are usually the children (78%); the remainder are other relatives, friends or neighbours
   - Among resident caregivers there are relatively equal numbers of women (54%) and men (46%)
   - Caregivers spend on average 4.2 hours a day on care
   - 3 out of 4 caregivers call for additional family or legal assistance

[36] https://www.vlaanderen.be/nl/publicaties/detail/vlaanderen-in-cijfers-2016-1
[37] https://www.health.belgium.be/sites/default/files/uploads/fields/fpshealth_theme_file/tabel_nl_2017.pdf
[38] https://www.vlaanderen.be/nl/publicaties/detail/vlaanderen-in-cijfers-2016-1
[39] https://www.kbs-frb.be/nl/Newsroom/Press-releases/2016/20161026AJ?hq_e=el&hq_m=4470864&hq_l=4&hq_v=fea0956d0c

- 15% of people with a severe disability do not receive any nursing or family care at all meaning that the informal caregiver is fulfilling care duties alone.
- Informal caregivers ask very limited amounts of help from so-called respite care, like day care centers or temporary residence in a residential care center - between 2% and 6% (non-resident caregivers) and between 4% and 14% (resident caregivers)
- The lower the income, the less informal caregivers search for professional help. In the 25% poorest municipalities, only 51% of the elderly with physical care needs and non-resident informal caregivers makes use of professional care. In the 25% richest municipalities, it rises to 62%. In the case of resident caregivers, the gap between the two types of municipalities is even greater.
- The pressure on non-resident caregivers is very high. 60% are active in the labour market, 8% have reduced their working hours, and 28% care for more than one person.
- More than half of people aged 70+ are informal caregivers. They run a high risk of getting health problems and going into social isolation.

5. **Elderly and patients**

Intermediary actors:

1. **Patient organizations:**
   All relevant Flemish patient organizations can be found on the website of the 'Flemish patient platform': http://www.vlaamspatientenplatform.be/. These organisations help to increase the quality of life of the patient and his environment by solving common needs and problems through lobbying and advocacy at all relevant policy levels and within all relevant health services.

2. **Elderly organizations:**
   Specific thematic advisory groups within the existing elderly organizations in Flanders give information to the elderly concerning Health and Care, for instance OKRA: http://www.okrazorgrecht.be/

3. **Expertise centres**
   These centres are specialised in specific target groups within the elderly population, often related to specific care needs or care profiles.
   - Dementia: Expertisecentum Dementie Vlaanderen (ECD): http://www.dementie.be/
     Local initiatives include http://www.dementie.be/tandem/ and http://www.dementie.be/memo/
   - Informal Care: Vlaams expertisepunt Mantelzorg[40]
   - Flemish expertise center for prevention of suicides: https://www.zorg-en-gezondheid.be/vlaams-expertisecentrum-voor-su%C3%AFcidepreventie
   - VAD is the Flemish Expertise Center for Alcohol, Illicit Drugs, Psychoactive Medication, Gambling and Gaming. VAD is also the umbrella organization of the Flemish organizations that work around alcohol and other drugs: www.vad.be

[40] http://jovandeurzen.be/sites/jvandeurzen/files/Vlaams%20Mantelzorgplan_0.pdf

4. **Hoge gezondheidsraad**
   The scientific advisory body of the federal government/ FOD Public Health, Food Chain Safety and Environment

5. **Federal Knowledge centre for Healthcare: https://kce.fgov.be/nl**
   The KCE, through its analysis and scientific studies, advises policy makers in making decisions in the field of health and health insurance. The KCE is not involved in the decision-making itself, nor in its implementation, but it has the task of paving the way for the best possible solutions. The KCE is active in four major domains:

			
Development	**Evaluation**	**Organization and Funding**	**Development**
of Clinical Practice Guidelines	of Medical Technologies and Medicines (Health Technology Assessment)	of Healthcare (Health Services Research)	of rigorous guides for adequate study work (Methods)

6. **Wetenschappelijk instituut volksgezondheid:** https://www.wiv-isp.be/nl/over-het-wiv
   The Scientific Institute of Public Health (WIV) is the scientific reference for public health. It has been supporting the health policy and policy making for innovative research, analysis, surveillance and expert advice for 112 years. In order to safeguard the health of the Belgians, the WIV scientists are active in five domains:

				
Food on the grid	Environmental impact on public health	One's health under supervision	Accessible healthcare for all	Quality of vaccines, drugs and medical labs

7. **Living labs Healthcare**
   The Care Living Labs of Flanders was started in 2013 financed by the Flemish government for three years. It provides a "test and experimental space" with focus on health and care for end users (including elderly) across all phases of the development of a new product or service. As a result, the end users become co-developers. Living labs deliver specific services to the developing organizations like
   - Co-creation

- Human-centred design
- Patient-centred design
- Live testing by end users (including care professionals) in different working and living environments
- Validated reports
- Insights for business model.

These living labs have a network of end users, care organizations, (local) governments and knowledge partners and can easily facilitate matchmaking for companies. The most mature health care living lab within Flanders is LiCalab (www.licalab.be), partner of Seas2Grow. Others can be found on www.carelivinglabs.be.

8. **Private and public venture capital funds**
   These entities offer funding to developers of products and services for the healthcare market based on a business file that is evaluated by different experts. Funding can be used for development as well as to start up the business (operational costs). In Flanders the most common ones are PMV Life Sciences and Care (http://www.pmv.eu/nl) and GIMV Healthcare (http://www.gimv.com/nl/investeringsfocus/health-care). The risk capital providers can be divided into 3 groups:
   • Public companies;
   • Private companies (often associated with banks or large financial groups);
   • Business angels (private individuals)

   An overview of all these companies operating in Flanders in the SME market can be found in the publication[41] of Risk Capital Providers in Flanders from the Agency for Innovation & Enterprise (www.VLAIO.be).

9. **Health start-up organisations**
   There are numerous organisations offer specific programs and services to start-up-companies to help them enter the market.

Supply actors:

Private sector: Companies of all ages and sizes (from start-ups and SMEs to big companies) and from different sectors are interested in the Belgian health care market. These companies are classified into the following categories, based on the products they develop:

- Medical devices
- IT
- Food
- Pharma and biotech
- Assisted living (mobility, living aids)
- Service providers (insurance companies, living assistants, educators etc.)
- Construction and Living
- Leisure and wellness

[41] http://www.vlaio.be/content/overzicht-van-de-risicokapitaalverschaffers-vlaanderen

Nursing homes, home care organizations, hospitals can also act as a supplier when they develop new products/services in close collaboration with companies or with the target groups.

VOKA Health Community (Chamber of Commerce)
VOKA HC companies are members of different provincial/regional VOKAs (Chambers of Commerce) that are interested specifically in the health and care market. It is a partner network of entrepreneurs, care professionals, knowledge centers and patients in Flanders to develop innovative solutions in healthcare. Through this cross-pollination, knowledge is built up, shared and implementation of innovations accelerated with a social added value. The Health Community wants to contribute to the strengthening and anchoring of the white economy in all of Flanders and Brussels.

(3) Barriers and challenges to market entry

Barrier 1: Absence of fees and incentives for remote services

There are no fees or incentives given by public funds for remote care services like telehealth. This jeopardizes the launch of self-management systems that allow the elderly to manage their treatment plans on their own. Flanders' Care organized a workshop of 100 professionals in 2014 (within the Interreg-project CASA) to find out what is required to implement telehealth. The 5 major factors necessary for telehealth products to be successful in Flanders include:

1. Connect people online to connect them offline: infrastructure and services linked
2. Revised financing/funding model necessary
3. The patient is in a central position
4. Privacy is guaranteed and liability settled
5. Integrate the care system

Barrier 2: Lack of investment by care providers

Care organizations should invest in in-house capabilities such as a dedicated care technologist or innovation manager to further innovative projects through the allocation of time and budget leading to implementation within their organisation. The Foundation of Innovation and Labour report (2017) describes both the need for digitalisation (and therefore IT-expertise) of care professionals and the need for new care professions, such as 'care coaches').
https://www.vlaanderen.be/nl/publicaties/detail/kennisdiffusie-en-innovatie-in-zorg-en-welzijn-rapport

Barrier 3: Fragmented market

The health and care market in Belgium is fragmented - there are different silos (based on different philosophies of life) that work separately on their own plans, objectives and projects. This makes it difficult for companies to reach out to all these silos. Suppliers are recommended to benefit from the intermediary organizations mentioned in the "Ecosystem" section offering matchmaking.

(4) Opportunities and facilitators to market entry

Opportunity 1: Government support for health goals

In order to emphasize its preventive health policy, the Flemish government's Agency for Health and Care is encouraging its citizens to pursue health goals. This initiative is creating opportunities for companies to develop new products/services that enable and support citizens (including the elderly) to meet their personal health goals. The goals are specific, measurable and generally accepted goals that must be realized in a certain period of time. The Flemish government launched this initiative in 1998, in accordance with World Health Organization guidelines. Regional proposals for health goals and strategies to achieve these goals are formulated at a health conference. The last conference took place in December 2016 and set the following goals:

1. The use of tobacco, alcohol, drugs and medication is reduced
2. Balanced nutrition and sufficient physical activity leads to healthy weight
3. Diagnose cancer faster in order to improve its control
4. The number of suicides in Flanders must decrease further
5. Aim for higher vaccination rates in the elderly
6. Continue to focus on falling and fracture prevention
7. Create a preventive policy plan for oral care, type II diabetes, malnutrition

Opportunity 2: Government priorities and support for pilot projects

Action plan Flanders' Care 2.0 (2015-2019)[42] identifies areas where the Flemish government wants to focus. Some priority areas including

- MHealth
- Data sharing (big data)
- M-Health
- Assistive technology and aids
- Chronic care model
- Integrated care - new models of collaboration and organization
- Care for talent and expertise
- Internationalization
- Ethical challenges

In addition, the federal minister of health has issued specific calls during the past 3 years for pilot projects in the following areas

- Reform of hospital funding
- Reform care for chronic patients
- Mobile Health (action plan e-Health 2013-2018[43])

[42] https://www.flanderscare.be/sites/default/files/media/VR%202016%200502%20MED%20%200056-%202BIS%20Actieplan%20Flanders%20Care%20-%20Actieplan_def.pdf

[43] http://www.deblock.belgium.be/nl/e-gezondheid-niet-meer-te-stuiten-eerste-actieplan-al-geactualiseerd

ii) Food

(1) Their Needs – Elderly and their informal carers

Overweight and obesity

The World Health Organization recommends at least 400 grams of fruit and vegetables a day – yet in 2013, only 11% ate the recommended daily amount of fruits and vegetables with more women (13%) than men (9%) following it. The percentage is the highest in the age group 65-74 years but drops sharply in the oldest age groups (75+). There is also a clear connection with the education level – those with a higher education degree are more likely to eat at least 5 servings of fruits and vegetables daily.

In 2013 in the Flemish Region, 50% of adults had a healthy weight (BMI between 18.5 and 25). An equal share (48%) was too heavy - 35% overweight (BMI between 25 and 30) and 13% obese (BMI higher than 30). 3% of adults are too thin. The percentage of overweight is much higher in men than in women. In the age group 55 to 64 years, more than half the population is overweight while in the 55 to 74 years age group, almost one in five is obese.

Malnutrition

In February 2013, specialist doctors, GPs and home nurses (a collaboration called NutriAction), together with the University of Antwerp, examined the nutritional situation of 3,641 Belgians aged 70+ living at home or in a residential care center. This was a follow-up to NutriAction I, conducted in 2008 when 5,334 Belgians aged 70+ were screened.

This study found that 45% of the elderly had a real risk of malnutrition with 12% actually being malnourished. The results in 2008 were very similar - 49% of home-living elderly experienced a real risk of malnutrition and 13% were malnourished. In the residential care centers, nearly six out of ten elderly people had a risk of malnutrition (57%) while 16% were malnourished. The percentage of malnourished patients in Belgian hospitals was estimated at 30-40%[44].

The project Seniorfood[45] looked at the needs of the elderly and opportunities in terms of nutrition. It investigated how adapted foods can be addressed. The target audience was divided into 4 subgroups based on their needs:

- Group 1: Older people living at home and not being cared for (able to eat and shop independently)
- Group 2: Older people living at home and lacking care (self-cooking and shopping a challenge at times)
- Group 3: Elderly people living at home and in need of care (eating and shopping often becomes difficult)
- Group 4: Elderly people receiving high-level care in residential care (cooking and eating is almost impossible).

Groups 1 and 2 buy products in retail or get them delivered at home. Group 3 makes more use of

[44] NutriAction I, 2008; NutriAction II, 2013
[45] http://www.flandersfood.com/projecten/seniorfood

home delivery and Group 4 are often supplied with food from large kitchens (nursing homes, senior living environments).

On the issue of intake of nutrients, fats and proteins, needs include:

- Group 1: Too high intake of energy-rich food, fat and salt. Limited fiber shortages, Vit D and Calcium
- Group 2: Too high intake of saturated fatty acids, sugars and salt. Insufficient intake of Fibre, Vit D, Calcium, Protein and Vit. A. Some risk of malnutrition
- Group 3: Reduced appetite, insufficient intake of energetic nutrition, Fibre, Vit A, B1, B2, B3, B6, B12, C, D, E, folic acid, calcium, iron, zinc and magnesium, proteins. Risk of deficiencies and malnutrition
- Group 4: Reduced appetite, decreased dietary intake, insufficient intake of Fibre, Vit A, B1, B2, B3, B6, B12, C, D, E, folic acid, calcium, iron, zinc and magnesium, proteins. Deficiencies and malnutrition.

Medical problems correlated with nutrition include:

- Group 1: Overweight, obesity; high blood pressure; Hypercholesterolemia; heart and vascular disease; (Pre) diabetes
- Group 2: Overweight, Obesity; high blood pressure; Hypercholesterolemia; heart and vascular disease; (Pre) diabetes, stomach and intestinal problems, infections and inflammations
- Group 3: cardiovascular disease; (Pre) diabetes, stomach and intestinal problems, infections and inflammations, osteoporosis, arthritis and osteoarthritis
- Group 4: Gastrointestinal disorders, infections and inflammations, osteoporosis, arthritis and osteoarthritis, decreased taste, chewing and swallowing problems, Alzheimer's / Dementia, Parkinson's, Frailty, Sarcopenia

(2) Ecosystem

Governmental stakeholders and advisory boards

1. Food products on the market are audited by the FAVV[46] (federal agency for safety of the foodchain). They check the production processes and take samples of food products on a regular basis that are evaluated in laboratories that are ISO-certified.
2. The 'FOD Volksgezondheid, veiligheid van de voedselketen en leefmilieu'[47] (federal department of health, food safety and environment) is responsible for the regulatory framework for the food industry in Belgium. They are supported by (scientific) advisory boards and commission:
    a. De European Foodauthority EFSA: An independent scientific committee to discuss risks assessments at a European level

[46] http://www.afsca.be/professionelen/
[47] https://www.health.belgium.be/nl/voeding

b. De Hoge Gezondheidsraad: Advisory board for all matters concerning food and food safety. Its mission is to act in a scientifically substantiated manner by means of a network of experts and permanent staff that give independent advice on current issues regarding Belgian public health.
c. Advisory board for biosafety: Advice concerning genetically modified organics.
d. Committee for advice concerning plants: Advice concerning plants and plant extracts
e. Scientific committee of the FAVV: Scientific advice concerning specific topics

FEVIA: Federation of Belgian food industry (intermediary)

FEVIA represents 28 sectors and 637 companies producing quality food and beverages in Belgium. It is committed to the sustainable growth of the Belgian food industry in consultation with all stakeholders. With the brand "Food.be - Small country. Great food." it combines the quality, diversity and innovation of Belgian food worldwide.

Flanders' food [48]: Cluster of knowledge partners Flanders (intermediary)

This unique, strategy-driven platform that, through innovation, contributes to a more competitive, innovative and sustainable agro-food industry. It reinforces the target group's innovation capacity by increasing scientific and technological knowledge and utilizes an integrated approach that contributes to the economic and social development of Flanders.

Target groups:

Flanders' FOOD stimulates innovation in food-producing companies with offices in Flanders and their direct suppliers from the food chain (raw materials, ingredients, auxiliaries, technology providers, logistics / transport / distribution, etc.). This is the **primary target group**.
The **secondary target group** includes:

- Production companies in neighboring countries / regions (Wallonia, NL, FR, UK, LUX and D) and their direct suppliers
- Producers and distributors of food supplements
- Requested customers: retail
- Products of animal feed
- Consumers

Nursing homes: meal organization and food cost (demand actors)

A small scale study of outsourcing in the WZC sector (catering, linen and cleaning), conducted by G. Sioncke in 2004, found the following trends in the nursing homes participating in this study (representing 1,632 beds):

- Own kitchen: approx. 50%
- Contract-catering (outsourced): approximately 50%

A small-scale study of 52 nursing homes performed in 2013 by Vonk gives an indication of organization of meals and food costs at nursing homes:

[48] http://www.flandersfood.com/wie-flanders-food

- Organization of kitchen
    - 50% organize warm and cold meals in their own kitchen
    - 50% depend on external catering for warm meals
        - Of this 30% still organize the cold meals in their own kitchen
- Average price setting food cost: €4 to 4.5 with the following distribution applicable to the different meals:
    - about 40% cost for lunch
    - about 60% cost for others (breakfast, drinks, afternoon snack, supper)

Catering services in nursing homes and hospitals: (supply actors)

In Flanders, the biggest suppliers of catering services for nursing homes and hospitals are Sodexo and Aramark. Food service companies that supply food to nursing homes and hospitals could also act as a distributor/reseller for companies to these markets. The largest food service companies are Java Foods en DeliXL.

Meal delivery @ home (supply actors)

Smaller groups of catering services focus on delivery of meals at the homes of the elderly. In Flanders 20% of the (vulnerable) elderly living at home regularly order meal delivery services priced between €6-8 for a warm meal. Most of the 'Public centres for social welfare' (OCMW) organize meal delivery services for the elderly in their own regions (public suppliers). There are several private suppliers that at times work as a subcontractor for the public centres, but also deliver services B2C. They have webshops or contact service lines where elderly people can order their meals.

Functional food for specific target groups of elderly

1) People with swallowing problems rely on alternatives to make eating more comfortable, such as:
    - Cereal powder (as a meal-replacement product)
    - Thickening powder (used in drinks)
    - Drinking foods
    - Deep freeze
    - Freshly made products by the nursing home

    Suppliers that control the market are Nutricia (Nutridrink, Fortimel, Thick and Easy); Revogan; Nestlé (Céreal) and Abbott.

2) People with malnutrition: 'additional meals' and 'drinking meals' are commonplace for specific target groups within the elderly, including oncology patients, patients with cognitive impairment (dementia, Alzheimer), and patients with non-congenital brain damage. Nutricia is an important player in this market.

(3) Barriers and challenges to market entry

Barrier 1: Consolidate offer to reduce cost burden

To reach nursing homes/hospitals, it is important to consolidate as many services as possible to decrease their administrative costs. That is why large distributors/resellers such as JAVA FOOD and DeliXL are often preferred as they deliver a complete range of products.

Barrier 2: Tight margins

As the average cost of food for a nursing home or hospital recipient is between €4 and €4.5 per day, the margins available to manufacturers and distributors are not high. By combining with the 'home' market (elderly at home), margins can increase.

Barrier 3: Reimbursement limitations

Reimbursement presently is only possible for food that is labelled 'clinical food' - a list is available on the NIHDI (RIZIV)[49]. It is important to show clinical validation in order to claim a specific health enhancing effect. Furthermore, certain sickness funds give some compensation for specific custom-made food products (e.g. for coeliac patients).

(4) Opportunities and facilitators to market entry

Opportunity 1: Proactive nutritional screening

Since 2011 there has been greater political attention to address the problem of malnutrition through a proposal[50] for a better screening that covers:

- Active screening and nutrition checks for people aged 75+ in nursing homes, hospitals and at home
- Reimbursement of nutrition and interventions for malnourished elderly people according to clear protocols based on national, international and professional guidelines.
- Creation of follow-up policy for the 75+ age group
- Set up training and education tools for care professionals.

Opportunity 2: New food enrichment products

Enrichment of food products with proteins, fibre and vitamins for the 65+ age group could drive existing food companies to deliver niche food products. Several knowledge institutes in Flanders work on this topic (KU Leuven, UGent, Flanders Food, Thomas More, Vives).

Opportunity 3: Food innovation

The elderly in nursing homes, hospitals and those living at home are interested in innovations in food. For companies that want to deliver to the elderly market, it makes sense to set up a business model for B2C (B2B2C) as well as B2B and to diversify the offer for them. For specific functional food

[49] http://www.riziv.fgov.be/nl/themas/kost-terugbetaling/door-ziekenfonds/gezondheidsproducten/voeding/Paginas/default.aspx#.WWdTtIVOJPY
[50] http://www.vlaamse-ouderenraad.be/Actualiteit/Achtergrondnota%20bij%20advies%20ondervoeding%20Vlaamse%20Ouderenraad.pdf

for target groups and patient groups, the market tends to pay up to 50% more for these products if they meet the specific needs of these elderly (enriched products, products for people with swallowing problems, products for specific allergens issues, etc.).

iii) Household and Personal equipment

(1) Their Needs - Elderly and their informal carers

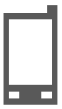
Technological aids, assistive aids, mobility aids and ICT are present in the lives of most elderly people. They can decide to buy or rent this equipment or get a reimbursement/compensation based on their specific profile/needs, which is often related to the degree of (care) dependency or disability.

The most common tools the elderly use at home are personal alarm systems, mobility aids, living aids (kitchen, bathroom, etc.), PC/tablets/smartphones/other communication means to be able to live independently.

Some elderly people decide well in advance to adapt their home to future needs. Certain smaller changes can be of great help like good lighting, sloping surfaces instead of thresholds, handrails on the stairs, convenient height of the worktops/ drawers/ cabinets, bath handles, shower and toilet, anti-slip mats, domotics (or home automation). More significant changes to the infrastructure changes could include installation of a stairlift, widening of doorways and installation of a bedroom or shower on the ground floor.

ICT and digitalization:

The Digimeter study[51] performed by iMinds in 2015 of 2,181 Flemish people aged 55-85 years age group assessed digitization of elderly people. Key findings for people 65+ include:

	79%	Have access to some kind of computer in their house: 38% has a desktop and 62% has a laptop
	26%	No interest in computer tasks, while 27% can use a computer elsewhere or is being helped by others to perform IT-tasks
	58%	Do not have a computer as they are not familiar/skillful in performing computer tasks
	54%	Have a tablet in their house
	53%	Have a smartphone; 67% have a mobile phone

[51] http://www.vlaamse-ouderenraad.be/info60+/statistieken/Digimeter%2055+_2016.pdf

	1%	Aware of wearables (smartwatch, smart wristband, smart sportwatch)
	85%	Have a digital TV account
	82%	Have an internet connection
	27%	Use 3G/4G (mobile data connection) on their smartphone instead of wifi

The (daily) use of all these tools (for elderly 65+ having them in house) is as follows:

	82%	Computer
	55%	Tablet
	79%	Smartphone

Anyone over 55 watches television content (TV shows, movies, series, sports matches, news bulletins) almost exclusively through the television screen and not through computer, tablet or smartphone. Online video consumption like streaming or downloading movies and series rarely occurs in 56-85 year olds. Online news is not yet integrated in the elderly's daily use: 40% of 65+ follows news on TV (or newspaper); only 8% follows news on the computer, 2% on tablet and 0% on smartphone.

Use of social media:

- 44% of 65+ have logged into social media websites in the past month
- Most popular is Facebook (39%), followed by Google+ (14%), YouTube (11%), LinkedIn (5%) and Twitter (4%)
- The use of so-called 'over-the-top' messaging services such as Facebook Messenger (17%) or Whatsapp (29%) is a lot less common for 56-85 year olds with a smartphone than younger people.

Only 6% are familiar with e-commerce.

Personal alarm system:

A personal alarm system (PAS) connects elderly with an alarm center round the clock. They also offer mobile devices with GPS localization, and features such as inactivity, CO and fire detection. A

personal alarm system can be rented for between €13-20 a month. Public and private health insurance organizations offer these alarm services to the elderly.

Mobility aids:

These are tools for people with reduced mobility who repay all or part of the sickness funds. Wheelchairs are the most common mobility aid but there are also walking tools, seat cushions, seat cushions, etc.

Fall prevention:

One in three elderly people in Flanders fall at least once a year. In residential care centers it can be up to 70% of the residents. Most often a fall leads to hospitalization. One of the common effects of a fall is a hip fracture. In Belgium, there are about 16,000 hip breaks per year, with a total annual cost of more than €310 million. 'Fall prevention week' is one initiative to raise awareness of the issue amongst the elderly and possible solutions, such as availability of home adjustments.

(2) Ecosystem

Flemish government (policy maker)

Due to the transfer of responsibility of (budget for) mobility tools to Flanders in 2019, the Flemish agency of Health is working on a renewed resource policy within the Flemish Social Protection (VSB). Flanders' Care is following the dossier with attention to innovation. On 18/11/2016, the Flemish Government approved the draft paper on mobility tools. The Flemish government gives financial compensation in some cases to people to renovate their house for a person of 60+ years (Vlaamse aanpassingspremie[52]). This is for both smaller infrastructural changes and bigger ones.

Sickness and care funds (commissioner)

These funds are responsible for the full or part reimbursement of aids for the elderly. List of these aids can be found on the website of the NIHDI (RIZIV) or on the websites of the sickness funds. Across Flanders there are several home care shops financed by the different sickness funds that allow the elderly to see and test all types of aids. They can buy the aids directly or rent them for a certain period of time.

- https://www.cm.be/diensten-en-voordelen/thuiszorg/materiaal/thuiszorgwinkel.jsp
- https://www.thuiszorgwinkel.be/nl
- http://www.devoorzorg.be/antwerpen/voordelen-advies/dienstverlening/personen-met-handicap/zorg-ondersteuning/Pages/hulpmiddelen.aspx
- http://www.partena-gezondheidshop.be/nl
- https://www.oz.be/gezondheid/oz-shop/onze-winkels
- http://www.lmzorgshop.be/

Orthopedic shops (500-1000 shops in Belgium)

[52] https://www.wonenvlaanderen.be/premies/de-vlaamse-aanpassingspremie-om-de-woning-aan-te-passen-aan-een-oudere-bewoner

In these shops, the elderly can find aids like shoes, insoles, bandage and also avail of tailor-made services.

Living assistant (upcoming market share in Belgium)

A home assistant is someone who helps with facilities, and has a strong interest in elderly people coupled with great empathy. They are the point of contact for residents at a residential home. He/ she is in charge of the organization and follow up all necessary facility services. This person is present at the residence on a regular basis, but also reachable by telephone or by e-mail.

Apart from private companies, insurance companies or specific tailored service companies, deliver these home assistance services to the elderly. Sometimes directly to nursing homes or to elderly in a service flat, as well as directly to people living at home or in collaboration with home care organizations. An example can be found on:
https://www.solidariteit.be/diensten/assistentiewoningen/woonassistent/

(3) Barriers and challenges to market entry

Barrier 1: Lack of awareness

Many elderly people are not aware of the possibilities of aids for activities of daily living (ADLs). Some home care organizations are setting up case managers or facilitators who introduce technology in their homes. These case managers help them not only to choose the technology, but also help to install it and follow-up on their specific needs. Very few of these case managers exist.

Barrier 2: High cost

Although Flanders sits at the top of the European rankings with regards to disposable income in the age range up to 50 years, it is ranked 14th among people aged 65 and over (EU-SILC-survey of 2014). Therefore, many elderly people cannot afford to buy the non-essential tools and equipment that the younger generations can.

(4) Opportunities and facilitators to market entry

Opportunity 1: Self-monitoring automation based systems

With the elderly people in Flanders getting more digitally connected (already 82% have internet access, 53% have a smartphone, 54% have a tablet, etc.), this opens the door for the development and launch of (self-) monitoring systems. In Flanders there are very few of such systems on the market.

Opportunity 2: Co-development mechanisms

It is important to co-develop innovations with end-users. The Netherlands has a mature landscape of living and care labs, elderly organizations etc. that can facilitate the process of co-development with these elderly people. See the Health and Care "Ecosystem" section for a list of these intermediary actors.

Opportunity 3: Innovative selling processes

It is important to include family and informal caregivers when selling ADL-equipment and tools to the elderly. A feeling of safety and getting the right information is important for these stakeholders. Tools with high reliability rates will score better.

According the report on 'knowledge diffusion on innovation in care and wellbeing' (https://www.vlaanderen.be/nl/publicaties/detail/kennisdiffusie-en-innovatie-in-zorg-en-welzijn-rapport), user-friendliness and privacy are as important as cost and value of an innovation.

In a recent study of university college VIVES (Kerckhof, 2016), criteria were developed that evaluate technology for their potential acceptance and its importance to the users. These include aspects of availability, ownership, reliability, security, usability, effectiveness, flexibility, security and aesthetics.

b) France

i) Health and Care

(1) Their needs - elderly and their informal carers

Headline statistics for the elderly:

				
54%	**100-300**	**1/4**	**1/2**	**2/3**
Concerned about their future health	The average monthly spend on health	Rejected care due to lack of means	Would like innovative tools to consult their doctor from home	Practice regular sports

The three major health concerns of the elderly are:

		
Communication problems	**Vision and sight**	**Back pain**

Improving everyday life is the main need, including:

				
Staying at home	**Simplification**	**Neurodegenerative diseases**	**Respite for caregivers**	**Coordination of care**

- Staying at home: The elderly, even in illness or loss of autonomy, want to guarantee their autonomy through technical aids.
- Simplification: Assistive devices should be simple to use, with clear and visible notes and clear advice for first time users. There is also a need to simplify the reimbursement procedure.
- Neurodegenerative diseases: Its high prevalence among the elderly results in many preventive and curative needs.
- Respite for caregivers: With the law recognizing caregivers and the role they play in the lives of the those who have loss of autonomy, there are many needs around giving the caregivers respite.
- Coordination of care: Elderly people are visited by a number of professionals usually from several organisations, which leads to communication challenges.

(2) Ecosystem

Supply actors

Silver care represents 400 healthcare companies in the Hauts-de-France region. Companies with high potential include: HMS Vilgo (manufacture and distribution of hospital and medical furniture for hospitalization and home care), Damart (comfort clothing for the elderly and textile innovator), Inovelan (Editor of e-health solutions, Secure, networked medical records management platform and Telemedicine), Alzprotect (Molecular development for treatment of Alzheimer's disease), Tous Ergo (Online sale of medical equipment and solutions for home autonomy), CA Diffusion / T-care (Supplier of medical equipment and daily living aids) and Alliance soins (Care coordination to facilitate home return).

Intermediary actors

Organizations that support the development of the Health and Care products in the Silver economy are:

- Eurasanté: The economic development agency of the biology, health and nutrition sector and in charge of the economic growth of health sector in the region
- NHL cluster: This cluster promotes research and development projects in the fields of food, biotechnology and health
- Clubster Santé: The healthcare network of Hauts-de-France

Demand actors

Facilities for the elderly:

- EHPAD: Residential accommodation for the elderly with care support

  The mission of EHPADs is to support fragile and vulnerable people and to preserve their autonomy through comprehensive care, including accommodation, restoration, animation and care. The EHPADs sign an agreement with the county council and the ARS (regional health agency), which provide them with financing in return for quality care objectives.

  The EHPAD Inventory displays the accommodation prices for these minimum benefits. This price may include other benefits in addition to this list of minimum benefits, such as the maintenance of each resident's personal linen. EHPADs may also, if they so wish, indicate the optional services offered. Each month, the resident must pay an invoice that breaks down into: A price for accommodation (average 65€ per day) related to stay within the EHPAD and a price for dependency (average 25€ a day) related to level of support the elderly is receiving by the EHPAD. The monthly price charged for EHPAD is based on two components: the price of accommodation + the dependency rate (depending on the person's dependency level) x the number of days. Approximately a month in EHPAD costs between 2600€ and 3600€.

  There are 2 public subsidies that can help pay for accommodation and dependency fees:

  - The ASH (social assistance for accommodation) provided that the establishment is entitled to social assistance, the housing subsidies that apply to the part of the invoice relating to the accommodation rate
  - The APA (personal allowance of autonomy) in an institution that applies to the portion of the bill for the dependency rate for persons in GIR 1 to 4 (people with moderate and high level of dependency). People with less dependency are not eligible to the APA.

  For persons with incomes below €2440.24 per month, the level of dependency does not affect the amount to pay for the elderly. They pay only the amount of the dependency rate for the GIR 5-6 corresponding to the minimum amount to be paid by all the residents of an EHPAD. Only one amount of remainder to be loaded is displayed on the results page.

- Residences autonomies: homes dedicated for elderly, without any medical support but where people can access some common services.

  Independent residences are designed to house elderly people who are mostly autonomous but no longer have the desire to live in their own. Only people older than 60 years of age and with low level of dependency (GIR 5-6) are eligible.

  These residences have a social purpose. As such, the cost of rents is intermediate. The invoice breaks down into different parts: rent or royalties rental charges; mandatory services costs (e.g., catering, depending on the proposed system); and optional service charges (e.g., outings). Residents of autonomous residences (ex-homes-homes) can benefit from the same sources of public funding as before: the APA (personalized autonomy allowance) at home, housing assistance; and the ASH (social assistance for accommodation) if the autonomous

residence is empowered to receive recipients of social assistance to the accommodation. The allocation of such aid depends on two criteria: Resources for ABS; housing assistance and the level of loss of autonomy for ABS.

Healthcare facilities:

- Hospitals (public, non-profit private and profit private)

Consumers:

- Through a distribution network of medical equipment shops. These shops are sited in cities and sell equipment, daily living aids and other products to the final consumer.
- Pharmacies also sell medical equipment for the elderly

(3) Barriers and challenges to market entry

Barrier 1: Need proven business case
It is mandatory for companies in France to demonstrate solvency. This can be challenging when there are limits on margins for suppliers of health and care products because many of these customers are facing financial pressure.

Barrier 2: Fragmented distribution Model
Distribution of medical equipment for home care must overcome a highly fragmented distribution network. Given the multitude of actors, manufacturers have a lot of marketing work to do.

Barrier 3: More intense regulation
With regulation set to intensify in the years to come, companies will have to invest more to be in compliance.

(4) Opportunities and facilitators to market entry

Opportunity 1: Caregivers with unmet needs
While the law on adapting society to meet the ageing population challenges has recognized the role of caregivers (11 million in France), many of their needs are yet to be met.

Opportunity 2: A necessary expense
Spending on health is a necessary expense. This has been amplified by the economic crisis as a consequence of which the boomers have shifted their spending towards health care while reducing recreational spending.

The main trends observed since 2012 (the date of the start of the medical analysis) are confirmed in 2015 with a "significant and growing recourse" to ad hoc hospitalizations with no specific link to a specific pathology (+335,000 people over four years) -she. The increase in the number of such

hospitalizations, which is explained by the aging of the population, makes it the first item of expenditure (30.7 billion euros).

Another phenomenon confirmed by the study, "the weight of mental health" (treatment of psychiatric diseases or consumption of psychotropic drugs) with expenditures paid to more than 7 million people reaching 19.3 billion euros (i.e. +2, 3% on average each year between 2012 and 2015).

In an article on "The Health of the French: What Results, What Reforms", (published in "La santé, qui balancean?", Cahiers français, n ° 369, July-August 2012, La Documentation française), Pierre de Montalembert That "France allocates a significant share of its domestic wealth to health spending: according to the OECD, in 2009, States Parties spent an average of 9.7% of their gross domestic product (GDP). With a rate of 11.8%, France ranks third, behind the United States (17.4%) and the Netherlands (11.9%).

The entry into force of the law on the adaptation of society to aging on 1 January 2016 is also an opportunity: 700 million euros per year should be allocated to support autonomy for the elderly.

Opportunity 3: Willingness for independence
Solutions that support independent living not only enable older people to stay in their homes for the longest time possible, but also reduce congestion for care services. 90% French people prefer stay at home rather than living in EHPAD (Opinion way 2012), but only 6% of homes are adapted to loss of autonomy (National Agency for Habitation, 2016). However, a lot of home care services do not have enough staff and have difficulties to find new employees or trained people.

ii) Food

(1) Needs of the elderly and their informal carers

					The major nutritional needs of the elderly are related to malnutrition and food deficiency
#1	**60%**	**85%**	**44%**	**35 million**	
Expenditure item for elderly people is food	Share of spending is on food	Women (50+ years) feel a balanced diet helps	Elderly people consume dietary supplements	Meals delivered in France	

No market as such exists for “elderly food” and hence the communication needs to be around adapted nutritional needs. Nevertheless, there are certain products with a clear orientation towards the elderly - products against cholesterol, margarine enriched with plant sterols, etc. The food needs of elderly people fall into two categories: 1. nutritional and 2. the resulting expectations

Nutritional:

				
Energy	**Protein**	**Calcium**	**Micronutrients**	**Lipids**
Lower than for adults generally	Same as for adults generally, to avoid muscle-wasting	Greater than for adults generally due to altered calcium metabolism	Greater than for adults generally because of physiological changes due to aging	Reduce fat consumption up to 70 years

Expectations:

			
Provenance	**Pleasure**	**Health**	**Practical**
Attachment to local products and produce	Discovery of new tastes and sensations	Interest in nutraceuticals, unprocessed products. Growing or manufacturing according to natural and ethical principles	Ergonomics (easy to open), legible labels and markings and how to use advice

Catering and home delivery of meals are essential elderly people with loss of autonomy. This is justified by the lack of desire to cook, challenges in purchasing and the inability to prepare meal. One trend that is yet to be justified is the development of single person meals that are easy and fast cooking (microwavable) targeted at boomers (young single elderly people) and widowers.

(2) Ecosystem

Supply actors

Companies with high potential in the region include Alterfoodie (Development and sales of an organic farmed, vegetable alternative to dairy products), Lesaffre human care (Development and sales of ingredients dedicated to nutrition and human health professionals working in the food supplements, pharmaceutical and functional food sectors), Bonduelle Food Service (Meets the nutritional needs of Elderly people through 12 "Eating Hands" meals that gives autonomy back to the elderly), Lactalis (Developer of Primevère, a margarine that helps fight cholesterol), Nestlé (Developed “Resource Senior Activ” drinking water that provides the ingredients and nutrients needed by Elderly people) and Sodiaal (Its Candia source omega 3 is a milk that contributes to fatty acid intakes).

Intermediary actors

- NHL cluster: This cluster promotes research and development projects in the fields of food, biotechnology and health

Demand

- Large retailers: Auchan, one of the most important large retailers of the world, has headquarters in the Hauts-de-France region
- Grocery stores specialized in healthy food
- Catering: Sodexo is one of the most important caterers in the market. They already work with many elderly facilities and hospitals
- Public actors: many cities are in charge of meal deliveries for the elderly

(3) Barriers and challenges to market entry

Barrier 1: Stringent regulations
Health claims are stringently regulated and require heavy investment for companies.

Barrier 2: Difficult marketing
It is difficult to find a balance between "dedicated products" and "marketing targets" i.e. there is no specific food for the elderly, but foods are available that meet the needs of older people.

Barrier 3: Innovation roadblocks
Innovation is hampered by low profitability and pressure on distributor prices.

(4) Opportunities and facilitators to market entry

Opportunity 1: Non-mature market with potential
Senior citizens are the main contributors to the growth of food sector given their monthly spend – they account for 60% of the market. And yet many of their food needs are not yet addressed.

Opportunity 2: Shift to healthy food

A desire to consume more healthy food has led to the search for "good food" (quality products that are local and unprocessed).

Opportunity 3: Rise in demand for food supplements
Consumption of food supplements is on the rise with 44% of the consumers being elderly people (their share expected to increase in the future).

iii) Household and Personal equipment

(1) Needs of the elderly and their informal carers

	**90%**	Elderly people wish to continue to live at their home
	**60%**	Their share of the total spend on household equipment

(1) Relational Services

While elderly people wish to stay at home, they sometimes require assistance and caregivers are not always available e.g. to help with house work, maintenance, gardening, fitting out, repairing or home delivery (for the most dependent). In France several platforms offer exchanges of services between individuals. Examples include Frizbiz, Stootie (which is based on the Uber business model) and Ged World (exchange of skills). The headline figures for relational services are:

	**20** Billion Euro market size
	**1.1** million jobs
	**550,000** equipped with telecare services

(2) Teleassistance

While more than 550,000 people are equipped with a telecare in France, the penetration rate remains low and focused on the oldest adults (i.e. those over 80 years). This market will continue to develop in the future as teleconsultation, telemedicine, alarm and surveillance become more widespread.

(3) Equipment

Several companies are beginning to focus on products that support the elderly in two ways: 1. staying in touch with family, and 2. maintaining autonomy in everyday life. There is continuous innovation in home automation. There is also the housing adaptation market and the new construction market. Start-ups and home automation companies have created numerous innovations to meet the needs of elderly people but at unaffordable prices (installation costs are very high).

Senior citizens of the Hauts-de-France have on average incomes below the national average. This equipment must offer a real benefit, without distorting the "at home" situation of the person and remain affordable (minimal work for adaptation). In many cases, work is carried out following an accident (e.g. installation of “walk into the bath” solutions following a fall).

(2) Ecosystem

Supply actors

High potential companies in the region include: Geemarc (Manufacture and sale of accessible telephony and telecom products and technical aids for Elderly people, visually impaired and hearing impaired), Ailyan (Young Innovative Company specializing in technologies for the elderly / disabled, it has developed a Touch Tablet adapted to the Elderly people), Yumii (Self-sustaining robot), Senior Handi Habitat (Service company specializes in the development and adaptation of living spaces for Elderly people).

Intermediate

- Cluster Senior: This cluster brings together a group of companies, mainly SMEs, located in Artois and focused on home-based care
- Cluster HBI: This cluster focuses on construction and excellence in home automation and smart building
- Picom: A commercial industries cluster

Demand

Companies specialized in construction

- Construction and public works actors (Eiffage, Bouygues, etc.)
- Public housing (Vilogia, Lille Métropole Habitat)
- Real estate development (specialized on elderly facilities)

Retail

- Large retailers (Home improvement): Leroy Merlin (headquartered in Hauts-de-France region), Castorama (home automation products)
- Multimedia stores: Boulanger (Headquartered in Hauts-de-France)

(3) Barriers and challenges to market entry

Barrier 1: Low prevention culture
Elderly people often wait for an accident to happen before they equip their home with the necessary products. They are becoming more aware of the need to prevent/reduce dependence and are now proactively equipping themselves is more commonplace than it used to be.

Barrier 2: Reimbursement model
For certain types of equipment, the level of reimbursement is decreasing as the business models and activity of the public and private organization supporting the solutions for elderly people continue to evolve. This uncertainty must be considered e.g. the potential disengagement of the state in the management of certain products except to when there is proof that the product will save money.

(4) Opportunities and facilitators to market entry

Opportunity 1: Untapped market
Elderly people represent 58% of the household equipment market yet account for only 10% of the marketing budget. Companies wishing to develop technologies for elderly people can rely on dedicated certifications e.g. AFNOR offers the certification "tested and approved by elderly people".

Opportunity 2: Unaddressed needs
90% of the elderly wish to stay at home if possible, creating a market for telecare to maintain the social bond and prevent adverse events, e.g. falls.

Opportunity 3: Loyal customers
Elderly people are a faithful target market and are constantly on the lookout for products with high value add. They are also pragmatic buyers who look for a product/service that covers their needs. Price is often not their first criterion when making a purchase selection.

The seniors demand a quality of contact, a response to the need and if possible, immediate quality. They also want responsiveness, quality in handling complaints as well as feel important. The promise must be kept when using an offer from a relational program. The imperative is therefore to keep the promises displayed by the brand. Within a loyalty or relational program, the problem is identical.

Case study: example of a loyalty program

Take the example of Club Notre Temps, a relational project of subscribers of the eponymous magazine that rewards their loyalty through a platform dedicated to the search for "Good Deals". It is structured around 3 statuses (Bronze, Silver, Gold). The approach of the target has been made through a unique relationship marketing in order to optimize the loyalty. A personalized approach was therefore defined in order to create a strong and structuring link. The feeling of recognition is strategic because the essential ingredient for a senior subscriber is the valorization of the seniority of his subscription.

The purpose of this affinity link is to provide additional experience in the relationship with subscribers. Unusual, some subscribers opt for the first time for a payment by credit card, whereas they are not

used to it. This type of behavior confirms the sense of security that the Club brings. This also validates the relational mechanics implemented.

The target is also very eager to the functional offers of the Club which is animated by a program of pushes customized according to a multichannel approach (email 2 times monthly, Enews 2 bimonthly, monthly double-page, call center at a defined frequency and charters Colors of the media).

In a context where purchasing power is the main concern, the club offers to this community the assurance of obtaining the best prices in areas of consumption of their choice, with the guarantee of a logistics and a service 100% satisfaction. For seniors, the image of perceived quality weighs as much as the real quality, in the attachment to the brand.

c) The Netherlands

i) Health and Care

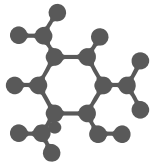
(1) Their Needs - Elderly and their informal carers

Signifying the transition of the welfare state towards a "participation society" in which people depend less on the government, King Willem-Alexander stated in his speech is 2013 that "people must take responsibility for their own future and create their own social and financial safety nets, with less help from the national government".

What this means is that even more people depend on informal carers, family and volunteers and consequently the informal network is obliged to provide more and care than before.

In 2008 an academic hospital in Rotterdam undertook research about the needs of elderly and their informal carers (mantelzorgers). The key findings were (https://www.erasmusmc.nl/cs-research/subsidies/3600331/pallasrapportgeneroinventarisatieouderen2008270212)

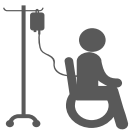
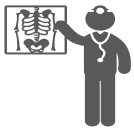
- As health care is fragmented in the Netherlands, if an elderly needs help or care, it is unclear who will handle the care request - it could be either the local authority, the health insurance, the patient himself or the long-term care act.
- Communication is an issue both between professionals or between those and families.
- Early identification of problems is lacking – it is only when the problems are significant that a lot of intensive and thus expensive care is necessary. Low-level care as a solution is much more difficult.
- Elderly people want as much information about staying healthy as possible (e.g. they would like to be informed about sports as it influences their wellbeing).
- They want to keep on participating in the society and meeting with others. Thus staying mobile is vital (http://mens-en-samenleving.infonu.nl/diversen/119972-waar-hebben-ouderen-van-vandaag-behoefte-aan.html).

				
Fragmented health care	Communication issues	Easy problem identification	Information sharing	Stay involved in society

In research conducted on the needs of informal carers, it was found that they suffer the most from psychical and emotional pressure (76%) and, including during organizing formal care for the client (73%) (http://www.ontwerpenvoorzorgverleners.nl/mantelzorger/behoeften-mantelzorgers/rce).

Since the abolishment of zzp, 1 in 3 people will live longer in the same house with higher care needs – not just formal care, but mostly from informal caretakers and volunteers (https://www.scp.nl/Publicaties/Alle_publicaties/Publicaties_2017/Oud_worden_in_Nederland).

People in the age group of 75 years and older are experiencing the following medical problems:

			
40%	**40%**	**20%**	**15%**
High blood pressure	Arthritis in knees and hips	Backache	Neck and shoulder ailments

Research further shows that almost 70% in the age group 55-65 years would describe their health as 'Good – really good' while only 57% in the age group of 75 years and older would describe their health as 'Good – really good'.
(http://statline.cbs.nl/Statweb/Download/Gezondheid_en_zorgge_280617134844.html)

(2) Ecosystem

The distribution channels for innovations funded by public money are difficult to enter. As stated in Section 1)c)i, the customs and the Chamber of commerce need to be consulted before entering the market. The government institutions will provide the necessary information to start a business in the Netherlands. Relevant information about innovation in the care sector can be found at www.zorgvoorinnoveren.nl/InternationalizationGUIDE_ZVI and https://www.youtube.com/watch?v=XYsl9we_-qk

Supply actors

Web shops where elderly people are buying online are one form of supply actor. They are a good route to market when goods or services are not funded by authorities. If the innovation is a

'commonly used good' that aims to make the life of the elderly person easier, then people might buy it online. Examples of commonly used goods include a walker and electronic bicycle.

Two web shops selling goods focused on the elderly are http://www.thuiszorgwinkel.nl/ https://www.medipoint.nl/ . Some products in the web shop are available on loan for free or funded by the health insurer.

Demand actors

Hospitals

Hospitals are funded by the government while health care insurers pay for the care itself. NVZ (Dutch Hospital Association) is an organisation that unites hospitals and protects the interest of the hospitals and specialist centers. Unsurprisingly it is an influential actor and for innovators and new businesses it is an interesting actor as they provide access into hospitals (https://en.nvz-ziekenhuizen.nl/about-the-nvz). When purchasing goods and products, the hospitals at times form an alliance to lower prices and receive better quality. Most purchasers are member of the NEVI (organization for purchasers). This institution organizes an annual event with purchasers working in the health sector (http://www.nevi-zorgcongres.nl/page217332/thema).

Municipalities / local authorities

The SCT have roundtable talks with people who want or need a facility paid by the government. In the Netherlands it has changed from 'ask for a facility' to 'pose a request for help'; and from 'I want a booster' into 'I have difficulties walking long distances'. Supplying a facility is thus an individual decision.

If the SCT decides to supply a facility to the requestor, the municipality pays for it, although the requester pays a contribution, the amount differing from municipality to municipality. The facilities offered by the municipality are mostly purchased within the region.

Examples of facilities (possibly) paid by the municipality are: booster and mobility related solutions, stair lifts and adjustments to homes receiving domestic help (https://www.rijksoverheid.nl/onderwerpen/zorg-en-ondersteuning-thuis/vraag-en-antwoord/ondersteuning-gemeente-wmo-2015).

Nursing homes

It is difficult to determine the exact number of nursing homes and related housing in the Netherlands because they are difficult to compare with different target groups, cash flows and different laws applying.

Nonetheless nursing homes can be described as demand actors as they purchase goods and products for their clients/patients/inhabitants. Care providers offering different types of care services and even medical services will obviously need to make a wider range of purchases.

Examples of large care providers in the region of Alkmaar offering medical services too are Evean, Philadelphia and Magentazorg. These providers offer domestic home care, physio therapy, occupational therapy, nursing homes and other types of housing with a focus on not just the elderly but also on the disabled (e.g. those suffering from dementia, who need rehabilitation after surgery, short stay housing etc.). These services are covered under the social care act, the long term care act

and the health insurance care act. In addition, they offer courses to increase wellbeing, exercising and creativity.

Intermediary actor

The National Health Care Institute (Zorginstituut Nederland) carries out tasks relating to two Dutch statutory health insurance schemes: the Health Insurance Act (Zorgverzekeringswet) and the Long-Term Care Act (Wet langdurige Zorg, Wlz). Its role in maintaining the quality, accessibility and affordability of health care in the Netherlands involves four tasks:

			
Managing the basic health care package	Encouraging improvements in health care quality	Advising on innovations in health care and education	Funding

Its Innovative Health Care Professions programme advises the Dutch Minister of Health, Welfare and Sport on innovations and improvements in health care and education. The programme plans to develop a new classification of professions and to design the right educational structure for the health care sector.

(3) Barriers and challenges to market entry

Barrier 1: Highly competitive market

The Netherlands scores 4th on the Global competitiveness index as a result of the high level of economic prosperity offered to the citizens. As a consequence, the environment to do business is good, which is an opportunity, but it leads to high competition as well. (http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf) (https://www.gov.uk/government/publications/exporting-to-netherlands/exporting-to-the-netherlands).

Barrier 2: Need for a compelling proposition

According to the Chamber of Commerce, entering a foreign health care market is among the most difficult markets to enter. This is particularly true in the Netherlands because the healthcare market there is fragmented. Only when a highly innovative, proven to be better than the current alternatives and (relatively) cheap product or service is on offer is export likely to be possible.

Barrier 3: Fragmented market

The market is fragmented and complex to enter due to the target group (elderly people) being divided across 3 regulations (in addition to the private market). The Chamber of Commerce advises suppliers to use a specialized consultant who offers customized guidance to suppliers, e.g. Crefact.

(4) Opportunities and facilitators to market entry

Opportunity 1: Technology sophisticated target group

Netherlands has infrastructure that is among the best in the world, be it roads, pavements, the internet or mobile phone usage. This offers a tremendous opportunity to businesses to profit from technology (e.g. e-health). What is more, if the elderly cannot use internet or computers, wellbeing organizations or libraries step in and offer courses to improve their skills. These courses are particularly popular in the Netherlands.

Opportunity 2: Early identification of problems

The National Institute on Public Health and Environment (RIVM) has published a report (called *Beter Oud worden*) that explores the challenges that elderly people face with prevention and voicing their problems in the early stage. A key finding is that what prevents early detection is that the elderly do not feel their voice is heard. This provides an opportunity for businesses to invent and create a way to identify and raise awareness of problems in the early stage in a way that meets the needs of the elderly. (http://www.beteroud.nl/docs/beteroud/nieuws/rivm-factsheet-vroegopsporing-20161010.pdf)

Opportunity 3: An innovation incubating culture

The Netherlands has several institutions and initiatives that stimulate doing business abroad. More specifically, an initiative named Care for Innovations stimulates innovations for the health care market and offer support for innovators to grow. www.Zorgvoorinnoveren.nl

ii) Food

(1) Their needs – The elderly and their informal carers

The Voedselcentrum (Dutch authority on nutrition) made a factsheet about the elderly in relation to food. The central message is that to live longer and to prevent/postpone becoming ill, it is important to eat healthily and exercise enough.

According to this report, the elderly face problems like being underweight or overweight (20%), alcohol abuse and a loss of appetite caused by medicine use. In the age group 55-75 years, 5.5% suffer from chronic intestines problems which increases to 7% (age group of 75 years and older).

When people are underweight they do not eat enough calories, vitamins, minerals, protein and other essential nutrients. This causes a multitude of problems, such as a loss of muscles and slower wound healing, which in turn leads to an increased risk of falling, decreased heart and lung capacity and overall reduction in the immune system. Compounding all this is the lack of a good and reliable screening method for professionals to determine underweight people.

On the other hand, being overweight causes its own set of problems, such as an increased risk of getting heart diseases or diabetes type 2. Around 13% of people aged 65 years and older suffer from diabetes type 2. When the elderly do not exercise enough, they risk a decrease of their muscles and thus an increased risk of disability, sickness and even death.

Another problem is that especially elderly do not often read the packaging of their food and nutrients. This increases the risk of eating food with too few nutrients or too much salt. According to the Voedingscentrum, the elderly should increase the density of their nutrients (voedingsstoffendichtheid).

In recent years, the government has decreased the funding for food and meals provided by the public sector, which makes it difficult for entrepreneurs to sell to the public sector. Since the social support act (Wmo 2015) has started, a lot of private initiatives have taken shape within different municipalities.

Several local authorities leave it to the market to organize meals for the elderly, though how it is organised varies across municipalities. As a consequence, a lot of private and semi-public organizations offer meals or grocery shopping options.

The municipalities have also set up Social Community Teams, which are teams based in communities and who talk to their clients before deciding the best option - the goal being to find the most suitable solution for each client. A large advantage of these SCTs is that they have a good view of the local network and local initiatives. Since the municipalities in general do not offer any grocery shopping facility or meal preparing facility (though prior to 2015 it was quite normal for municipalities to offer and supply those facilities), several local initiatives have filled the void.

The complexity of the new regulations means that preparing food is a task for the municipality while the feeding itself is left to the long term care act. That only counts for people who cannot eat themselves. This makes public funding services difficult and complex. Two consultancy firms that can advise companies about entering the market are Seijgraaf and Crefact.

(2) Ecosystem

It is the main responsibility of the province to organize the public transport, which is reliable, and to guarantee the network of the buses in the less densely populated regions. Therefore the older, but still mobile, population find it convenient to do grocery shopping. However, 20% say they experience difficulties doing grocery shopping (https://www.nrc.nl/nieuws/2015/04/28/cbs-ouderen-vaak-problemen-met-huishoudelijk-werk-a1416716).

Supply actors

The supermarkets, greengrocers and other suppliers offer ready-to-eat meals, though in most cases these meals are not qualified as healthy meals. Furthermore most of the supermarkets offer a delivery service (for a minimum purchase of 70 euros of groceries) which in itself is a financial burden for most.

Ready to prepare recipe boxes are sold online and delivered home by companies like HelloFresh, Marley Spoon and the Allerhande. The idea is that people receive one box a week with the necessary ingredients to prepare healthy and nourishing meals. This is an opportunity for innovators to offer a recipe box focused on the elderly with smaller portions and special recipes - a private initiative for selling directly to the consumer.

The circular economy operating in the Netherlands aims to diminish the amount of waste and to recycle as much as possible. Thuisafgehaald.nl is an initiative that links the circular economy to the food sector in which home cooked meals are shared and sold for a small amount of money, usually the cost price. The neighbours of the elderly can therefore act as suppliers. The laudable goal is not to make money, but to share the meals.

Social meeting venues (either belonging to care suppliers or a community centre) offering food initiatives are found on the website of the platform Care&Wellbeing Alkmaar. The local wellbeing organizations organize meals and dinners, which cost € 5 euros per meal. Everybody can benefit from the meals and all locations are easy to reach (http://www.pzwa.nl/socialeeetplekken.php). The local authorities do not have a leading role in supplying meals; it is instead left to the market and to wellbeing organizations.

Only people identified for the long term care act are permitted to consume (state-funded) meals within an elderly housing/residence/nursing home. Eligibility for the long term care act became more stringent when the regulations changed in 2015: only people who are not able to live on their own, are now eligible. As nursing homes typically prepare the meals in-house, they can be considered supply actors.

Demand actors

Elderly people who are not eligible under the long term act, but who do not want to live in a house anymore, can move to a service flat where all services are included such as cleaning, maintenance and meals. People pay those costs themselves. In Groningen a service flat has been sued by the inhabitants, because they were dissatisfied with the food provided by the current caterer. A group of the inhabitants has since found another caterer with good quality food. This example demonstrates that there is demand for good quality, healthy but affordable meals (https://www.rtlnieuws.nl/nederland/ouderen-voor-de-rechter-die-maaltijd-serviceflat-niet-willen-rel-totaal-ontspoord). Service flats can be described as a demand actor in the case when they buy the food from a caterer, but are a supply actor when they prepare the meals themselves for the inhabitants.

The average elderly person spends around € 6,00 per day on their food and meals (https://www.nibud.nl/consumenten/wat-geeft-u-uit-aan-voeding/).

(3) Barriers and challenges to market entry

Barrier 1: The right distribution channel

It is difficult to sell products to the public sector as it is quite complex to find the right distribution channel. That makes it an expensive and time-consuming process for innovators and new business. On the other hand, the private sector selling directly to the consumer is easier. Two consultancy firms that advise companies about entering the market are Seijgraaf and Crefact.

Barrier 2: Rigorous food safety

Products that contain vegetables or animal related products need to be checked by the Nederlandse Voedsel – en Warenautoriteit (the Dutch authority on food and non-food) for safety and compliance

to Dutch standards. This depends on several factors - for example whether the product was produced within the European Union or was it produced outside the European Union and then directly exported to the Netherlands? New suppliers need to be patient during these checks.

Barrier 3: Competition

In the region of Alkmaar, the reduction in government spending on food has driven the emergence of many new private and semi-public organizations offering meals or grocery shopping options to the elderly. Competition to (possible) new suppliers is therefore greater than ever.

(4) Opportunities and facilitators to market entry

Opportunity 1: Need for healthier eating (and living)

Metabolism changes as people age and so the elderly require need different nutrients to adults. In the Netherlands, 20 % of the elderly are either overweight or underweight. This creates an opportunity for innovators to stimulate the elderly to eat healthy meals.

Opportunity 2: Weaning off alcohol

A significant percentage of the elderly are suffering from alcohol abuse in the Netherlands. There is an opportunity to encourage the elderly to consume less alcohol. For more information, see https://assets.trimbos.nl/docs/6413c01e-20d2-428c-816a-16073606bb25.pdf.

Opportunity 3: Franchising

There is a recent upsurge in the number of franchises occurring in the Netherlands. Franchises appealing to the food habits and needs of the elderly could be an opportunity for innovators and new business.

iii) Household and Personal equipment

(1) Their Needs - Elderly and their informal carers

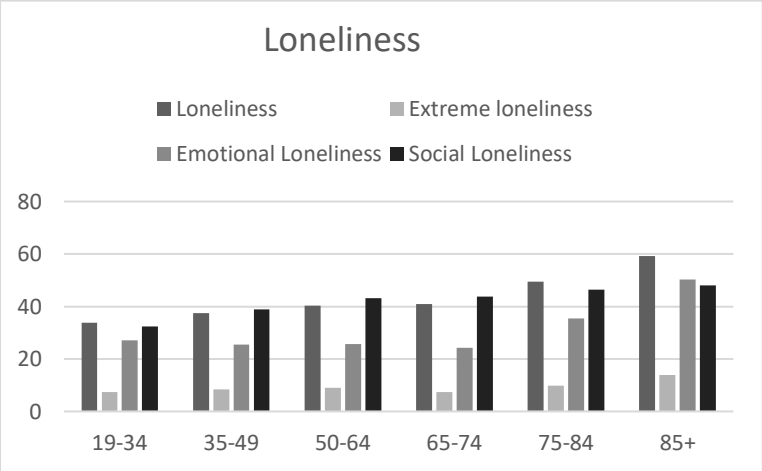
There are different ways to measure the level of physical restrictions that people experience. The GALI-indicator measures the number of people who experience limitations in their wellbeing and their daily activities for a period of 6 months and longer - 55% of the age group of 75+ years admit to experiencing limitations (http://statline.cbs.nl/Statweb/Download/Gezondheid_en_zorgge_030717123518.html).

Besides the GALI-indicator, the indicator for daily activities (Algemene dagelijkse levensverrichtingen) measures the extent of limitations in daily activities (11 in total) such as dressing, washing / showering, moving within the house or outside the house - 27% experience at least one limitation and in the age group of 75+ years it increases to 3.2 limitations per person.

The instrumental daily activities (instrumentele algemene dagelijkse levensverrichtingen) measures household and housekeeping activities, such as grocery shopping, preparing a meal and cleaning the house (7 activities in total) - 41% of elderly people admit to experiencing at least one limitation with an average of 2.3 per person.

The majority of the age group of 75+ experience limitations in moving, hearing and seeing. Most important is the fact that they experience this limitation. But it is also a risk for the individual, the family/ network and the municipality. Once an adverse consequence occurs, it becomes impossible to invest in preventive measurements.

Loneliness



A lot of people experience emotional and/or social loneliness – a problem that is not solely restricted to the elderly but to a significant percentage of younger people as well. In the region of Alkmaar, 38.5% experience loneliness in the age group of 19 years and older (https://www.volksgezondheidenzorg.info/onderwerp/eenzaamheid/regionaal-internationaal/regionaal#node-eenzaamheid-ggd-regio). There are two kinds of loneliness – emotional and social loneliness:

- Emotional loneliness is the lack of a relationship - intimate or emotional - with a partner or friend. The elderly experience this more intensely due to fact that many are widowed.
- Social loneliness is the lack of friends, colleagues, neighbors and acquaintances. Loneliness is measured by the Gierveld-De Jong& Van Tilburg loneliness scale (http://home.fsw.vu.nl/TG.van.Tilburg/manual_loneliness_scale_1999.html).

The National Fund for Elderly (Nationaal Ouderenfonds) reports that 22% of elderly have experienced 'chat tricks' (babbeltruc) (chatting with somebody with the goal to distract people and steal their debit card or enter their house). Most victims are the vulnerable elderly and the figure will rise as the elderly will live in their own houses for longer (https://www.ouderenfonds.nl/onze-organisatie/feiten-en-cijfers/). The police as well as the government have publicised adverts advising people on how to avoid chat tricks and to make people less vulnerable.

(2) Ecosystem

Supply Actors

Webshop Onbezorg Thuiswonen is a webshop that advises people about safety in and around their house. They also sell personal alarms which has a direct connection with an operating room/telephone service. The web shop also offers reviews on the products

(http://www.onbezorgdthuiswonen.nl/). In special cases it is possible to receive a refund or compensation - the decision is up to either the municipality or the health insurance company.

Webshop Thuiscomfort is another webshop that offers products aimed at vulnerable people who need help in and around the house, e.g. products for the bathroom, living room, kitchen and the garden (https://thuiscomfort.nl/home.html).

The National Fund for Elderly (Nationaal Ouderenfonds) focusses on helping the elderly fight loneliness with activities such as knitting together and Silver Line, a telephone service available for people who are lonely and wish to have a conversation. This is funded by donations and subsidies which allows the services to be free of charge and eligible to all (https://www.ouderenfonds.nl/deelnemen/zilverlijn/). It has cooperated with a television program to raise money to combat loneliness. The program was produced by Geer and Goor and their goal was to look for activities and hobbies for elderly, together with the elderly. After the TV show almost 10,000 people registered to be a volunteer (http://www.volkskrant.nl/televisie/2-400-nieuwe-vrijwilligers-voor-het-ouderenfonds-dankzij-geer-en-goor~a3775192/).

Aside from national initiatives, several local wellbeing organizations conduct events and activities for the elderly (e.g. a course on 'How to use a computer'). These organizations are widespread with every municipality having its own organization (or equivalent) and work with volunteers who offer services based on demand and supply, for example gardening or grocery shopping. They also offer activities to stimulate social contacts in order to prevent loneliness. The local organization in Alkmaar is WonenPlus Alkmaar (http://www.wonenplus-alkmaar.nl/).

Foundation 'The Time Machine' organizes activities for elderly people based on their interests when they were young, such as dancing to the music from their youth/adulthood. This is a powerful antidote to loneliness as music evokes memories, makes them dance and stimulates solidarity (https://www.stichtingdetijdmachine.nl/over-de-stichting/).

Demand actors

The municipalities supply products, goods or services to people who need help so they can continue to participate in the society and be able to live longer in their own house. These are purchased from distributors such as Welzorg. The goods and products are purchased by other companies. Municipalities do not produce themselves (https://www.welzorg.nl/).

(3) Barriers and challenges to market entry

Barrier 1: Lots of competition

There are many initiatives already established in the Dutch market (see http://www.beteroud.nl/ouderen/thema-projecten.html for a list). It is important for innovators to undertake an analysis of the current competitors and substitutes.

(4) Opportunities and facilitators to market entry

Opportunity 1: Housing for life

Housing for life (levensloopbestendig wonen) is a hot topic for the (local) government in the Netherlands. There are subsidies to improve houses while public housing corporations are stimulated to increase the number of houses where housing for life is possible.

Opportunity 2: Increasing purchasing power

As the target group continues to grow, so does their purchasing power. This is particularly so in elderly women due to their pension. The purchasing power of this group grew 30% between 1995 and 2005. (https://www.cbs.nl/nl-nl/nieuws/2017/10/ontwikkeling-inkomen-en-vermogen-65-plussers-na-95).

d) The UK

i) Health and Care

(1) Their needs - Elderly and their informal carers

Headline Statistics: Elderly health

	**45%**	of pensioners report physical disability[53]
	**33%**	of people in their late 80s require assistance with eating, bathing, toileting and dressing
	**60%**	of people aged 60+ have at least 1 LTC, rising to 93% of people aged 90+. 40% of people aged 85+ have 4 or more LTCs[67]
	**1/3rd**	suffer a fall that can cause serious injury and even death every year[54]
	**7%**	have a diagnosis of Dementia[55]

[53] Family Resources Survey 2010/11
[54] Age Concern, Stop Falling: Start Saving Lives and Money
[55] Alzheimer's Society, Dementia UK Update

	**73%**	of over-50s respondents (average age 63) describe themselves as lonely[56]

Given these headline statistics, it is unsurprising that 51% of the total public social care budget and more than 40% of the total public healthcare (NHS) budget in England is currently spent caring for the elderly[57].

Headline statistics: Unmet needs

There is an ever growing mismatch between the demand for health and care services, and their availability. Local authority budgets have been cut 25% in the last 10 years with the following consequences:

1.2 million people	**41% of hospital admissions**	**65%**	**182% increase in number of days elderly people stay in hospital**
with unmet need for assistance with everyday activities[67]	by people aged 65+[67.] This is an important contributing factor to the £30 billion gap between NHS spending and budget expected to accrue by 2020[58].	of the recent increase in hospital admissions is from people aged 65+[67]	because of unavailability of home care (compared to 6 years ago)

Unless significant reductions in demand and service efficiency gains can be found, this mismatch will only worsen as the number of people aged 65+ living in the UK increases by 48.5% in the next 20 years[22]. Central and devolved public-sector departments and service providers are responding to this by encouraging individuals to proactively take greater responsibility for the health and wellbeing - of not only themselves, but for their friends and family as well.

Headline statistics: Informal carers

There are roughly 9 million informal carers in the UK providing care worth £132 billion – much more than the public-sector social care budget. The sustainability of the NHS and local authorities is

[56] The Guardian, Three-quarters of older people in the UK are lonely, survey finds, March 2017, https://www.theguardian.com/society/2017/mar/21/three-quarters-of-older-people-in-the-uk-are-lonely-survey-finds

[57] HSCIC, Personal Social Services: Expenditure and Unit Costs, England, 2014 http://content.digital.nhs.uk/catalogue/PUB16111/pss-exp-eng-13-14-fin-rpt.pdf

[58] Full Fact, Spending on the NHS in England, 2017 https://fullfact.org/health/spending-english-nhs

therefore dependent on the number of informal carers increasing proportionally with the ageing population. The following headline statistics must also be considered:

37% of carers	2/3rd	76%
aged 80+	have compromised health	who provide 20+ hours of informal care each week experience discomfort during their caring duties[67].

(2) Ecosystem

Demand actors

Since 1948, the UK has had a public-sector health service (NHS) that is free at the point of use and means-tested public-sector care services (social care) to the elderly and disabled.

Recent financial pressures have required these systems to be more selective in the services that they offer and to whom they are offered. This transfer of responsibility from the state to the individual has meant that suppliers of health and care innovations are choosing to sell to private purchasers.

The introduction of personal budgets (a set budget that the individual can request the state spend in their chosen way, i.e. on specific health and care products and services that they desire) and direct payments (where the individual receives money from the state to pay for the approved health and care products and services) is also shifting many supplier's marketing and sales efforts away from public service providers and towards the public population itself, i.e. end-users.

The UK's **public health** services have gone through numerous changes in response to the fast-changing demand for these services. Major organisations comprising today's NHS include:

- Clinical Commissioning Groups

There are 207 CCGs that receive about two-thirds of NHS England's budget, split according to the health needs and demography in their local geography. They use this budget to commission health providers (GPs, hospitals, ambulance services, etc.) to provide community, mental, secondary and, increasingly, primary healthcare services. They also penalise the providers when they do not meet outcome targets (e.g. too long waiting in A&E or for operation).

- Primary Health providers

There are approximately 7,875 general practice surgeries in England[59] providing appointments and services with GPs, practice nurses and, in some surgeries, a range of allied healthcare professionals. Most general practices are Limited Liability Partnerships (private businesses) receiving money directly from NHS England or (increasingly) CCGs. The funds they receive are based on size of patient list, proportion of patients with certain diseases, and proportion of these patients who receive certain checks and who remain within defined health boundaries.

[59] HSCIC, General Practice Trends in the UK to 2015, http://content.digital.nhs.uk/media/21726/General-Practice-Trends-in-the-UK-to-2015/pdf/General_Practice_Trends_in_the_UK_to_2015.pdf

- Secondary and Community Health providers

There are 135 acute non-specialist trusts (including 84 foundation trusts), 17 acute specialist trusts (including 16 foundation trusts), 54 mental health trusts (including 42 foundation trusts), 35 community providers (11 NHS trusts, 6 foundation trusts, 17 social enterprises and 1 limited company), and 10 Ambulance Trusts in England. NHS foundation trusts are semi-autonomous organisational units within the NHS. Trusts that are not Foundation status are supervised by the NHS Trust Development Authority.

About 11% of the population is covered by some form of **private medical** insurance[60]. However, spending on private healthcare is dwarfed by NHS spend: £25.5 billion per year by private healthcare providers versus £127.5 billion per year by the NHS[61]. Nevertheless, private health providers may be an attractive customer for suppliers of innovations, as they may encounter less bureaucracy and more direct decision-making when planning trials, negotiating sales contracts, etc.

Whereas the NHS is free at the point of use, 48% of residential home residents and 39% of nursing home residents pay for all of their **care** costs (many more pay for some of it). All UK citizens are eligible for a free Care Assessment from a local authority care worker or occupational therapist. However, only those who are meet minimum needs and means thresholds receive state-funded support to finance their needs (by default through a personal budget or direct payment arrangement). The needs-based threshold is now almost universally substantial or even critical need.

The average premium paid by private purchasers of care home services is 43% higher than that paid by local authorities for the same services[62]. This cross-subsidy model is true for home care services too. This is compelling all types of care provider to increase the proportion of private purchaser clients / residents that they attract as local authority payments often do not cover their costs.

Whereas roughly 94% of NHS contract spend goes to public providers[63], less than 11% of UK care providers are public organisations, i.e. owned and run by local authorities[64]. Private care providers are held to the same rigorous standards as public care providers by the Care Quality Commission regulators and the local authorities commissioning their services on behalf of state-funded clients / residents. However, their private status can allow them distinct characteristics that suppliers may find attractive.

The reader is advised to read the "Ecosystem" sections of the "UK Food Subsector" and "UK Household and Personal Equipment" chapters of this report for information about how the various demand actors procure supplier products and services, and for more information about end-user eligibility for state-funded innovations.

Intermediary actors

[60] Kings Fund, UK private health market, 2014 https://www.kingsfund.org.uk/sites/files/kf/media/commission-appendix-uk-private-health-market.pdf
[61] Nuffield Trust, NHS in Numbers, 2015 https://www.nuffieldtrust.org.uk/resource/nhs-in-numbers
[62] Laing and Buisson, Care of Elderly People Market Survey 2013/14, 2014
[63] Full Fact, NHS Privatisation: the numbers, 2015 https://fullfact.org/health/nhs-privatisation-numbers/
[64] Centre for Health and the Public Interest, The future of the NHS? Lessons from the market in social care in England, 2013 https://chpi.org.uk/wp-content/uploads/2013/10/CHPI-Lessons-from-the-social-care-market-October-2013.pdf

National **care** intermediary actors include the National Care Association (based in Rochester, Kent), the Registered Nursing Home Association, and the United Kingdom Homecare Association (based in Surrey). Most counties in England also have a local Care Association and / or Domiciliary Care Association. These private Associations vary not only in size but also function. Some offer free membership to care providers, but others charge for membership. Associations who charge premium prices usually offer:

- meetings, seminars and conferences on topical subjects
- resources that support care providers with regulations
- negotiated discounts with select suppliers
- reduced prices for staff training programmes
- on-demand advice and guidance on all aspects of care and business practice.

Of particular interest to companies producing and supplying innovations related to enabling **activities of daily living** is The British Healthcare Trades Association (BHTA). This Association represents over 400 companies with mobility and transportation aides, communication devices, seating and positioning products and adaptive clothing. Companies with a special interest in telecare or telehealth are advised to consult the Telecare Services Association website, especially because TSA membership is a pre-requisite for some public-sector contracts.

A key umbrella organisation representing the interests of suppliers of **medical, health and care** innovations is MedilinkUK. This organisation provides data to the UK Government on numbers of subsector supply actors (see next "Supply actor" section). The regional constituents of this national membership network in the UK S2G region are South East Health Technologies Alliance (including its special interest group International Centre for Excellence in Telecare) and Medilink South West (lead by Business South West). Services provided by these networks include networking, meetings, conferences and seminars on topical subjects, training, industry representation to policy-makers, and a range of consultancy-type services – some provided for free, some at a cost.

Innovators can also find support from within the demand side, most notably from the NHS's Academic Health Science Networks. The AHSNs in the 2 Seas region are 1. Eastern AHSN, 2. Kent, Surrey, Sussex AHSN, 3. Wessex AHSN, 4. South West AHSN. The NHS periodically launches competitions for suppliers to win grant funds to develop and commercialise products and services meeting unmet needs. These competitions are usually run in collaboration with the UK's innovation agency, Innovate UK. Patients are given a voice to influence their local NHS services through the network of 152 local Healthwatch organisations.

Supply actors

"Strength and Opportunity" is a report published annually that presents the latest statistics on the UK medical technology and biopharmaceutical sectors[65]. The Office for Life Science and Department for International Trade now also offer a publicly available portal (https://lifesciences.trade.gov.uk) that enables users to search for MedTech companies in a specified UK geography. As of Summer 2017, the portal finds 70 companies in the UK 2 Seas region with Assistive Technology products, and 74 companies with Digital Health products. The major clusters of MedTech companies in the UK 2

[65] Department of Health, Department for Business, Energy & Industrial Strategy, and Office for Life Sciences, Strength and Opportunity, 2016

Seas region are in Southend-on-Sea (Essex), Cambridge (Cambridgeshire), King's Lynn (Norfolk), Portsmouth and Southampton.

In addition to traditional suppliers of health and care products – namely companies with a primary function in R&D, manufacturing and sales – some large and innovative housing, health and care providers in the UK are also developing and supplying innovations in-house. Graham Care Group, for example, is primarily a small chain of nursing homes in Kent, Surrey and Sussex. However, it also develops technologies such as a voice-activated recording system that records audio in clients' rooms to allow friends and family to listen to clips of the interactions that their loved one has had with staff that day.

Another "supplier" function that some housing, health and care providers are diversifying into is telecare provision. This is particularly in those regions where the local authority has tendered this service out to external suppliers. Other local authorities have retained telecare as an in-house service, such as on the Isle of Wight (Wightcare) and in Medway (Medway Telecare). This means that some departments within local authorities identify with having "supplier" functions too.

(3) Barriers and challenges to market entry

Barrier 1: Spending cuts

Since the start of the austerity programme in 2011, financial pressures have had an impact on local authorities and on those who rely on local authority payments (e.g. care providers serving state-funded care recipients and elderly people). Local authority payments to care providers have been cut 6% in real-terms[66], while 1.2 million people have unmet needs (up 48% since 2010)[67].

With resources stretched in provider organisations, even change that ordinarily would have an easy and short transition period with excellent long-term return on investment becomes suddenly unattractive or unfeasible to implement.

Barrier 2: Reorganisation and siloes in the NHS

The NHS has a history of frequent reorganisation, due to short political cycles, fast-changing demography, and recent financial pressures on public services. As a result, suppliers find it difficult to establish a consistent route to market with alignment of costs and benefits across health and care providers.

A major goal of the upcoming reorganisation (implementation of 44 "Sustainable Transformation Plans" for integrated local health and care service provision across the country) is to break down the siloes that exist between and within health and care providers. However, the increased devolution could create even more diverse routes to market for suppliers.

Barrier 3: Highly fragmented market

[66] Lang and Buisson press release, 26 November 2015. More than a cash injection needed to fix social care

[67] Age UK, Briefing: Health and Care of Older People in England, 2017, http://www.ageuk.org.uk/Documents/EN-GB/For-professionals/Research/The_Health_and_Care_of_Older_People_in_England_2016.pdf?dtrk=true

The majority of UK care providers are private businesses (89% in 2012[68]) and small (the average care home provider has 20 beds and 17% have fewer than 5 beds) leading to a highly fragmented market. We estimate nearly 9,000 organisations providing domiciliary and residential care in the UK 2 Seas region alone that suppliers would need to negotiate with[69].

(4) Opportunities and facilitators to market entry

Opportunity 1: Greater consumerism

People eligible for state-funded health and care products and services receive a personal budget or direct payments[70], giving them the ability to choose the exact products and services that they receive. This has opened up the state-funded market by reducing the monopoly of Preferred Suppliers chosen by public service providers such as local authorities and the NHS.

Opportunity 2: Outcome-based reimbursement

A shift in how UK health and care providers will be reimbursed - based on the outcomes they achieve (as judged by service user satisfaction, quality of life and health status "results") as opposed to the tasks that they have delivered (or "time-to-task" commissioning)[71]. Suppliers who help health and care providers to improve outcomes and, importantly, evidence these outcomes, will be looked upon favourably.

Opportunity 3: Automatic reimbursement mechanisms

In 2016, Simon Stevens, CEO of NHS England, announced that Medtech devices and apps will be included under NHS national payment rules helping to accelerate uptake through a new Innovation and Technology Tariff. This removes the need for multiple local price negotiations, and instead guarantees automatic reimbursement when an approved innovation is used. It also allows NHS England to negotiate national 'bulk buy' price discounts on behalf of hospitals and patients.

[68] Centre for Health and the Public Interest, The future of the NHS? Lessons from the market in social care in England, 2013 https://chpi.org.uk/wp-content/uploads/2013/10/CHPI-Lessons-from-the-social-care-market-October-2013.pdf

[69] Care Quality Commission website accessed May 2017 http://www.cqc.org.uk/

[70] http://www.nhs.uk/Conditions/social-care-and-support-guide/Pages/direct-payments-personal-budgets.aspx

[71] Institute of Public Care and Oxford Brookes University, Emerging practice in outcome-based commissioning for social care, https://ipc.brookes.ac.uk/publications/John_Bolton_Outcome_Based_Commissioning_Paper_April_2015.pdf

ii) Food

(1) Their needs - Elderly and their informal carers

As the elderly become frail, their ability to perform a number of essential tasks related to food decreases. A study by Age UK[72] identifies a number of barriers that elderly people in the UK 2 Seas region face when shopping for food:

- Accessing food shops and supermarkets – particularly those with restricted physical mobility living in rural areas (counties of Cornwall, Devon, Dorset, Norfolk and Suffolk)
- Inside the store – issues of store layout, accessibility, availability of helpful staff and the existence of supporting facilities such as adapted toilets
- Appropriate packaging – packaging of food items sold in conventional stores is found to be inadequate by many old people. Elderly people need small portions at a reasonable price and packaged in age-friendly containers (easy opening, easily readable instructions in plain English).

As mobility restrictions become more severe, older people can become housebound. In these cases, the elderly may rely on formal or informal carers or other services to deliver food to their residence. Online food shopping is currently increasing, but the following barriers remain for the elderly:

- Low digital literacy
- Difficult to use websites
- Poor internet coverage
- Expensive internet connections.

Elderly people with declining health and co-morbidities can have special needs for ingredients or formulation of foods. For example, because the elderly have lower energy requirements and are less physically active, they are susceptible to obesity. In fact, more than three-quarters of 65 to 74 years old adults are obese in the UK[73]. Adapted low fat and low-calorie diets are thus recommended for older people[74]. Diets with low saturated fat and salt are also recommended for elderly people, as they account for most of the 70,000 annual deaths from cardiovascular diseases in the UK[75].

Malnutrition is also highly prevalent among the elderly, affecting 1.3 million 65+ in the UK[76]. Poor eating poses a particular risk to diabetes patients (currently affecting almost 2 million over 60s in England and Wales[77]).

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[72] Age UK, Food Shopping in Later Life: Barriers and service solutions, June 2012, http://www.ageuk.org.uk/Documents/EN-GB/For-professionals/Conferences/Final_Food_Shopping_Report.pdf?dtrk=true

[73] Anne Gulland (2010). Obesity among over 65s in UK reflects "lifetime of gaining weight". BMJ, 341:c3585. doi: https://doi.org/10.1136/bmj.c3585

[74] British Nutrition Foundation, Older adults, February 2016, https://www.nutrition.org.uk/nutritionscience/life/older-adults.html

[75] British Heart Association, CVD Statistics – BHF UK Factsheet, March 2017, https://www.bhf.org.uk/-/media/files/research/heart-statistics/bhf-cvd-statistics---uk-factsheet.pdf?la=en

[76] Malnutrition Task Force, Malnutrition Factsheet, January 2016, http://www.malnutritiontaskforce.org.uk/resources/malnutrition-factsheet/

[77] Diabetes UK, Facts and Stats, October 2016, https://www.diabetes.org.uk/Documents/Position%20statements/DiabetesUK_Facts_Stats_Oct16.pdf

(2) Ecosystem

Several supply actors operating in the S2G region offer food products especially adapted to the needs of the elderly. Food manufacturing and distribution companies such as Oakhouse Foods Ltd (ready meals) and Wiltshire Farm Foods Ltd (frozen meals) (both in Wiltshire) produce a range of meals (mains, soups, desserts) with ingredients (low fat / sugar / calorie, allergen-free) and textures (soft, tender, puree) appropriate for the special needs of the elderly.

Elderly people and their carers (demand actors) can place orders directly on the companies' websites. These websites have been designed with the elderly in mind and provide educational content and detailed information on the properties of the meals offered. The companies offer home delivery services, which tend to be either entirely free or free above a minimum order value.

A second type of supply actor operating in the UK 2 Seas region are large caterers such as Apetito (also Wiltshire). Demand actors for these catering services include:

- Public-sector NHS hospitals, which procure food using formalised and highly structured processes that favour high-volume purchases, e.g. NHS Supply Chain.
- Public-sector Local Authorities, which require multi (usually five)-year public tendering processes to designate companies as Preferred Suppliers of services. Services commissioned by local authorities range from full meal services (meal preparation, staff hiring and training, venue management) to meal-only delivery for local authority "meals on wheels" services, lunch clubs and day centres.
- Private-sector care providers, which procure food and related services by establishing direct commercial arrangements with suppliers. The existing major suppliers meet Care Quality Commission (CQC) and National Association of Care Catering (NACC) standards.

A third type of supply actor are manufacturers and distributors of special-formulation nutrition products and feeding tools. Nutricia Ltd (Trowbridge, Wiltshire) is the UK's market leader in supplying advanced medical nutrition products for the elderly and the sick. Due to the sensitive and specialised nature of their product line, Nutricia products reach end-users exclusively through healthcare professionals. Nutricia also offers home delivery of nutritional supplements and feeding equipment, quality care call centre for scheduling and ordering, ongoing training and advice (including a 24/7 advice line), a pharmacy service and domiciliary nursing.

All of the traditional major supermarket chains now offer online shopping, providing easy access to all mainstream food products, sometimes without a delivery charge if minimum spend is met[78]. A recent development is Amazon's Pantry grocery service, with which consumers can purchase groceries from supermarket giant Morrisons[79].

For consumers with more discerning expectations and more disposable income (such as the 520,000 elderly people with large, mortgage-free houses[80]), numerous subscription-based meal-kit services are rapidly gaining market share. These services, such as HelloFresh, usually consist of a week's

[78] https://www.statista.com/statistics/630462/leading-online-grocery-retailers-united-kingdom-uk/
[79] https://www.theguardian.com/business/2016/feb/29/amazon-enters-fresh-food-market-with-morrisons-deal
[80] https://www.marketingweek.com/2016/03/17/dont-overlook-the-over-65s-the-four-groups-of-retirees-that-marketers-need-to-understand/

supply of fresh ingredients (sometimes distinguished as high-quality or organic only) and accompanying recipes, which are delivered direct to the consumer's door.

These supply actors are supported and promoted by a number of nation-wide **intermediary actors**, including:

- Industry bodies, which provide networking, advocacy and business development services to their memberships of food stakeholders.
- Networks of general-purpose food manufacturers such as the Food Industry Network, the Food Club International or the Food and Drink Innovation Network. These networks organise meetings between different stakeholders to develop business and promote trade between their members. The Food and Health Network (headquartered in Norwich, Norfolk) gathers both food and drinks companies and researchers associated with the Institute of Food Research to exchange knowledge and share the latest research. Innovate UK's Knowledge Transfer Network Food Sector puts companies and innovators in contact with the knowledge and funding (including Innovate UK grants) that they need to bring new products and processes to market.
- Trade bodies are networks of companies belonging to the same functional area (e.g. food manufacturing, logistics or export) with the primary goal of promoting trade through advocacy, networking and knowledge dissemination. Examples of food trade bodies include the Food Storage and Distribution Federation, the Food and Drink Exporters Association and the British Frozen Food Federation.
- Professional associations' membership bases include different types of supply actors present in a particular market segment, such as the Chilled Food Association and the Food and Drink Federation. A particularly relevant professional association is the National Association of Care Catering (Faygate, West Sussex). This National Association supports and represents the interests of care catering companies in residential homes, day centres, day care or domiciliary care.

Intermediary actors interested in the specialist area of nutrition and hydration of the elderly include the Malnutrition Task Force and the British Association for Parenteral and Enteral Nutrition. These national groups work with hospital, local authority, care home and voluntary organisation demand actors to raise awareness and share research findings on malnutrition of the elderly. Health and care professionals responsible for different aspects of elderly nourishment and nutrition gather in membership organisations such as the British Dietetic Association, the British Geriatrics Society, and the British Society of Gerontology (headquartered in Pulborough, West Sussex). These membership organisations play important roles in disseminating best practice to all types of demand actors, including through training and development of health and care providers, and education of the general public.

Elderly-focussed charities are perhaps the most significant vehicles of advice on nutrition and hydration to the elderly directly. Several nation-wide charities have branches in many counties in the UK 2 Seas region. They offer a range of services mainly promoting improved access of elderly people (demand actors) to adapted food. Several local branches of Age UK offer food-related services: for example, Age UK Norwich (Norfolk) organise shopping trips in an accessible minibus to older people with reduced mobility; and Age UK Isle of Wight run the Good Neighbour Scheme, a food shopping and home delivery and/or escorted shopping service for the elderly. The Royal Voluntary Service

(RVS) is another UK-wide charity with a strong presence in the 2 Seas region. The RVS runs the well-known Meals on Wheels programme, which delivers thousands of regular and special-diet meals to the home of elderly individuals, as well as many local Lunch Clubs. Some branches of the Women's Institute provide similar services.

(3) Barriers and challenges to market entry

Barrier 1: Need for food delivery services

Elderly people with reduced mobility may require food delivery services which are arranged with suppliers via telephone or online-based systems. While digital literacy is on the rise, there are still significant numbers of old people with very low digital literacy: two-thirds of adults over 75 do not have any internet access, and less than 10% over-75 have ever used a smartphone (2015 figures[81]). Low internet and mobile connectivity tends to affect in particular rural areas with low population density, such as those in the S2G counties of Cornwall, Devon, Dorset, Norfolk and Suffolk.

Barrier 2: Highly fragmented market

Small and medium food companies selling their products to care providers may experience difficulty to grow and gain scale due to the highly fragmented care home and domiciliary care market. There are almost 9,000 organisations providing domiciliary and residential care in the UK 2 Seas region alone that suppliers would need to negotiate with[82].

Barrier 3: Financial pressures

Many demand actors have significant pressures on their finances. This means that suppliers of premium-priced foods (like specialist diet foods and supplements), will need to present a compelling value proposition to persuade them to prioritise their money on these items over other essential and competing expenditures, e.g. heating.

(4) Opportunities and facilitators to market entry

Opportunity 1: Leverage reputations of charitable institutions

Large charities such as Age UK and the Royal Voluntary Service offer food access and delivery services in most counties in the UK 2 Seas region. Partnering with these charitable institutions which have established reputations would not only provide access to a large customer base, but also improve the brand power and brand recognition of the company.

Opportunity 2: Endorsements

Receiving endorsement and support from membership organisations such as the British Dietetic Association, as well as think tanks and charities aiming at tackling malnutrition such as the Centre for Ageing Better, the British Nutrition Foundation or the British Association for Parenteral and Enteral

[81] Ofcom, Adults' media use and attitudes – Report 2016, 21 April 2016, https://www.ofcom.org.uk/__data/assets/pdf_file/0026/80828/2016-adults-media-use-and-attitudes.pdf
[82] Care Quality Commission website accessed May 2017 http://www.cqc.org.uk/

Nutrition, could boost product credibility and also enable food companies to gather robust evidence of the benefits of their products.

Opportunity 3: Existing distribution channels

Partnering with established online retailers of independent living and mobility products would provide a strong distribution channel for adapted foods and feeding products and ready meal delivery services. This is particularly true because the UK has the highest percentage of its elderly population with access to the internet regularly making online purchases (78%) in Europe[83]. This kind of partnership would provide the company with an excellent marketing channel and broad customer base. It would provide the online retailer with a more complete service and new business.

iii) Household and Personal equipment

(1) Their needs - Elderly and their informal carers

Social isolation and loneliness are significant problems among British elderly people. A recent poll by Gransnet, a social networking site specifically targeting old age users, found that 73% of the over-50s respondents (average age 63) described themselves as lonely[84]. This situation can be particularly prevalent in rural and sparsely-populated areas such as those present in many UK 2 Seas counties. Loneliness among the elderly can be tackled with a variety of communication technologies and those enabling recreational activities involving some degree of social interaction.

Self-confidence and mental health status can be strongly improved if elderly people with declining capabilities are offered opportunities that allow them to continue enjoying hobbies and activities such as watching TV or listening to the radio, reading, playing music, performing fine arts, cooking, solving puzzles or playing games. Innovations can support the elderly to continue these activities as their physical mobility and senses become impaired.

Maintaining mobility can be a significant challenge in old age – mobility impairments have been consistently reported as the most common type of impairment in the UK. Around 3 million over-pension age adults report mobility-related disability. Driving may be critically important in communities where means of public transportation are not as frequent or accessible as would be ideal. In these cases, personal transportation may be essential for access to public services, family and friends, and even food. If decline in health condition and capabilities becomes more severe, walking aids and wheelchairs may be required to move even short distances.

Bathing, cooking, personal hygiene and dressing are some activities of daily living (ADLs) for which a broad range of adaptive household items and personal aides have been developed in the UK 2 Seas region. Positioned at the intersection between the health and care and the personal household sectors, telecare systems allow for formal and informal carers to remotely track the status of an elderly individual, act in case of need, and promote healthy habits and lifestyle.

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[83] http://www.telegraph.co.uk/news/2016/12/14/uk-seniors-likely-europe-shop-online/

[84] The Guardian, Three-quarters of older people in the UK are lonely, survey finds, March 2017, https://www.theguardian.com/society/2017/mar/21/three-quarters-of-older-people-in-the-uk-are-lonely-survey-finds

(2) Ecosystem

Many supply actors in the household and personal items industry are large companies operating across the country and offering a variety of products and services with different routes to market. Few of them focus on the elderly specifically.

When deciding whether to sell to the public- or private-sector, companies must be aware that public service providers can only fund products and services that meet substantial or critical health and care needs. This excludes personal and household equipment "nice to haves", e.g. leisure and recreational activities. For example, if a local authority occupational therapist assesses an elderly person as having substantial or critical long-term care needs, they will pay for the individual to receive telecare or minor house adaptions[85]. However, if the elderly person is assessed as having low health and care need, telecare and house adaptions will be considered as "nice to haves", and the individual will have to pay for them themselves as household and personal items.

The NHS has a responsibility to provide products that support ADLs (as well as any necessary occupational therapy) for the first 6 weeks after hospital discharge. After 6 weeks, responsibility shifts to the local authority as mentioned above, which re-assesses if the old person's need is substantial or critical.

Most actors supplying household and personal equipment focus on selling them directly to the elderly end-user or their caregivers. Several large online retailers of independent living and mobility products currently have a strong presence in the market, competing with mobility shops on the high street. These companies sell a broad range of products (bathroom, kitchen and household aides, adapted dressing products, telecare and communication devices, mobility scooters and wheelchairs, games and recreational activities) to a variety of demand actors, including the elderly, their formal and informal caregivers, and institutional care providers.

In addition to large online retailers, there are also a number of smaller, subsector-specific manufacturers, developers and distributors of personal and household products in the UK 2 Seas region. For example, One Switch (Billericay, Essex) is a small web-based retailer of computer games and adapted controllers appropriate for elderly and disabled individuals, and The Able Label (Maidstone, Kent) is a manufacturer and retailer of assistive womenswear directly selling to individuals with physical and cognitive impairments.

Generalist retailers such as department stores or chains of clothes or furniture shops also stock some products targeted at the elderly. However, it is unusual in the UK to find physical stores exclusively targeting this age group, or even stores assigning an area of shop floor to this age group exclusively. Notable examples are the major clothing and food chain Marks and Spencers (M&S), and retail stores belonging to the UK's "Co-operative Economy"[86], which, although not exclusively targeted at the elderly, have a large percentage of their customer base from this demographic.

The diverse household and personal equipment subsector is supported by an equally diverse set of intermediary actors. A number of UK-wide industry bodies have been formed to represent the interests of and create synergies between companies providing household and personal items. For

[85] NHS Choices, Care equipment, aids and adaptations, January 2015, http://www.nhs.uk/Conditions/social-care-and-support-guide/Pages/equipment-aids-adaptations.aspx
[86] https://www.uk.coop/

example, the British Healthcare Trades Association (BHTA) represents over 400 small to large companies producing and supplying ADLs for the elderly, such as mobility and transportation aides, communication devices, seating and positioning products and adaptive clothing.

The major type of intermediary actor influencing the uptake of household and personal equipment innovations by the elderly are non-profit organisations in the voluntary sector. Large, UK-wide charities such as Age UK have networks established across the UK that offer community-based services such as computer courses or recreational activities. Some also disseminate and promote adoption of assistive technology by the elderly and their carers.

The SAGA charitable magazine has a country-wide reach and a monthly readership of over 1 million - the vast majority of which are over 50 years of age. This magazine includes features on topics ranging from exercise and days out to nutrition and hobbies.

A number of web-based independent living portals also have national reach and offer advice and access to many different classes of adapted products. Examples include the Living Made Easy portal developed by the Disabled Living Foundation; the Independent Living portal (www.independentliving.co.uk); Spring Chicken; (www.springchicken.co.uk)and the My Ageing Parent portal (www.myageingparent.com).

Small sector- and condition-specific non-profit organisations are also important intermediary actors in the 2 Seas region, including:

- ICT: Digital Unite (Fareham, Hampshire) is a public company operating in the ICT sector that supplies digital skills training and development to care homes (including elderly residents), local authorities and housing providers. Their Digital Champions Network initiative has gathered Silver Economy actors to promote digital literacy and technology adoption.
- Mobility: Charities championing elderly mobility in the 2 Seas region include Cornwall Mobility (Truro, Cornwall) and Motability Charity (Harlow, Essex), which provide advice, financial support and access to selected products.
- Recreation and leisure: The Wheelyboat Trust (Petworth, West Sussex) promotes recreational water activities to disabled and elderly individuals.

(3) Barriers and challenges to market entry

Barrier 1: Competitive online channel

Partnering with an online retailer with an established customer base and far reach may seem like an excellent option to enter the market, especially as the UK has the highest percentage of its elderly population with access to the internet making regular online purchases (78%) in Europe[83]. However, small companies may experience low bargaining power and unfair preference for competitor products.

Barrier 2: Low digital literacy and internet penetration

The lack of internet access (60% of people aged 65+ do not have internet access), reduced digital literacy (66% of British people aged 65+ lack the skills to search information online, while almost half of the 55+ population lack basic internet skills) and low adherence to internet shopping (only a third

of people aged 65+ buys goods or services over the internet) severely restricts the success of a web strategy.

Barrier 3: Low disposable incomes

1.6 million British pensioners have "poverty-level"[87] disposable incomes, while another 1.2 million have income levels just above the poverty line[88]. This means that many elderly people will have to prioritise essential expenditures such as food and heating over "nice to haves" such as telecare systems, smart clothing items and mobility scooters.

(4) Opportunities and facilitators to market entry

Opportunity 1: Under-served market segments

Supply actors may find important routes to market by specifically targeting market segments that are currently underexplored. For example, the adapted clothes market is in its infancy, and companies supplying smart and robotic clothes will enter the British market with a first-mover advantage.

Opportunity 2: Partnerships that tackle digital exclusion

ICT companies would benefit from awareness raising and greater credibility if they could partner with well-known charities and networks running programs tackling digital exclusion, such as Age UK (which runs digital literacy programmes such as Reach for IT), the Good Things Foundation, Citizens Online and Digital Unite.

Opportunity 3: Leverage low-cost mobile technologies

The reducing cost of smartphones and tablets (retailing at under £40) and simpler access through national generalist retailers such as Tesco, Argos and Amazon UK, is enabling more and more products to have a digital component.

3) Regional comparisons

The aim of this Study is to help companies with innovative products or services for the elderly understand the potential markets in the 2 Seas regions in Belgium, France, the Netherlands and the UK. These concluding remarks will consider comparisons of political and policy influences, the needs of the elderly, the structure of existing markets and the key influencers, the barriers to entry and the opportunities and facilitators. It is evident that all the above factors differ, sometimes quite radically between the regions and countries examined, and these contrasts will be explored to enable companies to better target their effort. However, initially some factors common to all regions and countries will be considered.

[87] "Poverty" being defined as incomes of less than 60% of median incomes (after housing costs)
[88] Age UK, Money matters, July 2016, http://www.ageuk.org.uk/professional-resources-home/policy/money-matters/poverty-and-inequality/ ; "just above the poverty line" is defined as incomes between 60% and 70% of median income (after housing costs)

Common demographic challenges (and opportunities for innovators)

The first and most obvious common factor is that all regions and countries face the challenge of demography. The ageing population is creating unprecedented levels of demand for health and care services requiring that new approaches be adopted for delivering health and care as both public and private sector budgets continue to be squeezed. There is a general policy push across Europe to integrate more fully health and care provision, to allow more people to live at home for longer and self-manage their conditions, all of which will provide opportunities for companies with innovative products and services to meet growing existing needs and cater for new developing markets. The expected increase in the burden placed on informal carers (family and friends) will also lead to opportunities in support of their challenges, especially by remote monitoring and communication.

It is common across regions to see increase in the use of digital means of communications in the elderly, and digital health and care technologies being adopted both by public and private sectors to enable increases in efficiencies and effectiveness of health and care delivery. Again, these quite profound changes in society provide opportunities for entrepreneurs not only in health and care but in the food, household and personal equipment subsectors of the Silver Economy.

The common health and care needs across the regions include a requirement to help prevent poor health (physical and mental) through encouragement in physical activity, good nutrition, opportunities to continue work, good quality housing, reducing social isolation, and reducing alcohol and tobacco consumption. Despite preventative initiatives undertaken by all regions, common health and care challenges still remain including managing long term conditions e.g. high blood pressure, heart disease, lung problems, pain including arthritis and diabetes. There are also common mental health challenges across regions including dementia and social isolation (loneliness) which can result in depression leading to exacerbation of long term conditions. The physical and mental challenges result in commercial opportunities for companies but to meet these substantive challenges in the elderly with essential improvements in efficiency and effectiveness will require better working of the triple (research, company, policy-maker) or quadruple (research, company, policy-maker, citizen/user) helices.

Political and commercial differences across the regions

The national and regional context in which companies will have to operate varies widely across the 4 countries, both in their political and commercial landscapes.

Funding of health and care is mostly a combination of public and private sector with varying degrees of complexity in each country. For example, around 90% of the care sector in the UK is managed by the private sector but around 60% is paid for by the public sector. On the other hand, health services in the UK are 90% paid for and run by public sector (NHS). In Belgium, public health is funded though mandatory health insurance via employees coupled with a reimbursement system. Residential care for the elderly is predominantly publicly financed. It is essential for companies to understand fully the means of payment for health and care in each country before they embark on any sales drive. Detailed cost/benefit analysis for the introduction of any new technology or service in a care pathway is necessary when presenting to potential customers, whether public or private sector.

Several regions encourage development of triple helix (academia, industry and care / clinician collaboration) and quadruple helix (academia, industry, care / clinician and elderly end-user

collaboration) models to assist with innovation in support of the elderly through policy and pilots. It may be beneficial for companies to seek out those regions with ongoing positive policies and pilots for them to develop relationships with stakeholders and understand markets more fully.

The 'Living Lab' concept is one which has been adopted to varying degrees in Europe. For example, the Care Living Labs of Flanders started in 2013 provided a "test and experimental space" with focus on health and care for end users (including elderly) across all phases of the development of a new product or service. As a result, the end users become co-developers. Living labs have a network of end users, care organizations, (local) governments and knowledge partners and can facilitate matchmaking for companies as well as provide opportunities to develop better products and possible sales.

Policy makers in Belgium have developed positive policies in support of the elderly through their Flemish Elderly policy plan, which gives equal rights and opportunities to the elderly. The region has established a Flemish elderly council of elected members to advise local governments. They also have a programme of support to companies developing products and services to the Silver Economy financed by public and private sector programmes.

In France, the national government has identified the potential of the large and growing silver market economy and formally recognised it with a "Silver Economy contract". This contract sets targets for all subsectors including health, food, home leisure and transport, and an overall target to increase the national GDP by 0.25%. Tangible outcomes of French policies in support of the Silver Economy are the labelling of products and services with 'Tested and Approved by a Panel of Elderly People', integration of the concept of the Silver Economy into university curricula, and the provision of support to a business investment fund dedicated to this sector of the economy.

In the Netherlands, decision making is de-politicised and interests of the elderly are protected by a range of non-governmental organisations and advisory councils comprising stakeholder representatives such as unions for pensions, unions for the elderly, and associations of care and housing. Municipalities in the Netherlands have more power to drive policy than in many other European countries.

In the UK, there is no specific elderly policy-making agenda; the elderly is covered by general policies relating to health and social care. However, there is a strong charity sector in the UK representing the needs and lobbying on behalf of the elderly, which is dominated by Age UK.

Common opportunities across the regions

At a general level, the commonest opportunities for companies across Europe (and beyond) are the development of products and services in support of the health, well-being and care of the elderly which are more efficient and effective (better) and cheaper than those which are currently used. At a more specific level, this could include the development of appropriate digital communications technologies to foster links between patients, carers and health and care bodies. It could also involve the development and deployment of remote digital health and care technologies to monitor and manage elderly people with physical and mental health and care needs.

All regions are attempting to develop more integration of health and care needs and therefore another common opportunity for companies would be to develop products and services, both assistive technologies and software which enable this to happen at scale and pace.

Barriers to innovation across the regions

Barriers to entry in health care, food and household and personal equipment markets for the elderly are consistent with the barriers facing most sectors generally. It is regarded as easiest to create a company and sell product in the UK as company creation is relatively easy and cheap with minimal bureaucracy. In other 2 Seas countries, it may be a more protracted process involving several government and non-government organisations and requiring more financial security. Private sector investment in companies may also be easier in the UK, which has a relatively well developed financial market, but other countries (including France and Belgium) have created specific investment funds for the Silver Economy, which could prove helpful.

Barriers to entry to the health and care market are notoriously difficult to overcome and include regulatory hurdles, silo budgeting, funding constraints and market fragmentation. Profit margins may be high, however, should sizeable markets be accessed. In the food sector, there are fewer regulatory barriers but much tighter margins and more competition; new entrants should probably consider ways of adding value to products and developing speciality products for the elderly.

Conclusion

There appears to be tension in policy-makers and facilitators in Europe around whether the elderly market is a distinct market with its own specific needs which can be met by age-specific policies and through catalysing age-specific products and services, or whether general policies and market access is adequate. The 2 Seas countries span both extremes (notably France in the case of the former, and the UK in the case of the latter).

In this Study, elderly people are defined by age but in life represent a broad spectrum of needs, challenges, wealth, experience, aspirations and intellect. One approach may be to recognise that the 'elderly' of the future are the incredibly broad range of workers and consumers of today with high expectations of product, service and independence. If the private sector can capture this market now, then perhaps it will develop new products and services to meet the needs of its ageing customers and retain their loyalty in later years.

4) SEAS 2 Grow project scope

Project aims

This Market Study was prepared and published during 2017, in the first 12 months of the Silver Economy Accelerating Strategies (SEAS) 2 Grow project. The aims of this EU Interreg project are to:

- Set up a proactive Silver Economy ecosystem accelerating the delivery of technological and social innovations for the 2 Seas market (areas lying along the North Sea and Channel coasts in Belgium, France, the Netherlands and the UK), and support it with new tools, methods and services for all stakeholder types (including companies, local authorities, elderly people and their informal carers, and housing, health and care institutions).
- Create synergies with local authorities to implement common strategies in the Silver Economy sector and develop new financial models.

Accompanying deliverables

The Market Study is a major component of the package of work that is not only scoping the Silver Economy ecosystem in the 2 Seas region and increasing recognition of key Silver Economy stakeholders, but also helping to inform the tools, methods and services that the Seas 2 Grow Cross-Border Accelerator should provide. The other deliverables directly supporting this Study to meet these objectives are:

- A "Silver Economy stakeholder needs report", which is available for download from https://www.seas2grow.com/files/. This report highlights the key similarities and differences between the stakeholder met and unmet needs and the barriers they face in meeting their personal objectives (such as to live independently in the case of elderly people, or to provide high-quality and cost-effective services in the case of health and care providers, or to commercialize enabling innovations in the case of suppliers) across the four 2 Seas countries. The content of this report is informed and validated by the following two project activities:
    - "Needs Finding Workshops" attended by a range of Silver Economy stakeholders in each of the four regions.
    - A survey of almost 250 supply actors (companies with innovative products and services), intermediary actors (organisations supporting the development, commercialization and adoption of Silver Economy innovations, e.g. trade bodies and investors) and demand actors (elderly people and their informal carers, housing, health and care providers, and local authorities) from across the 2 Seas region.
- An "Online Tool" that helps companies to understand the regulatory and market conditions in the major Silver Economy subsectors of health and care, food, and household and personal equipment in each of the four countries. This tool can be accessed at https://www.seas2grow.com/online-tool/
- An online map of actors interested to become more involved in the development, trade and access of innovations for the elderly, available at https://www.seas2grow.com/map/. This map is searchable by purpose, region, innovations of interest or keyword. New actors can automatically add themselves to the map.

Future accompanying deliverables

The Market Study, Silver Economy stakeholder needs report, Online Tool and Map described above are together informing a "Strategic Guide", which will be published during 2018 (https://www.seas2grow.com/files/). This Guide will present a comprehensive comparison of the Silver Economies in the four 2 Seas regions, highlighting their relative strengths, weaknesses, opportunities and threats, and aiming towards describing the vision for a stronger Silver Economy across the 2 Seas region. The Strategic Action Plan, which will be published in 2020, will describe specific actions for this smart specialisation vision to be achieved. We expect these actions will be predicated on a high level of local authority involvement and impetus. SEAS 2 Grow therefore endeavours to catalyse and strengthen collaborative relationships with local authorities across the region.

Complementary deliverables

In addition to the package of work described in the previous section, SEAS 2 Grow consists of two other major packages of work:

1. Establishment and creation of a Silver Economy Cross-Border Accelerator

The accelerator is the vehicle that provides the tools, methods and services to Silver Economy stakeholders that help them address their unmet needs. The direct and immediate beneficiaries of the accelerator are suppliers of innovative products for the elderly. These companies can apply to win SEAS 2 Grow resources such as:

- Assistance to recruit end-users, organise and facilitate exploration / co-creation sessions
- Lab testing and evaluation expertise
- Assistance to recruit trial sites and organise and facilitate trial activities
- Business planning expertise

To apply for the accelerator, please visit: https://www.seas2grow.com/files/

2. Innovative funding and financing models in the Silver Economy market

The SEAS 2 Grow project incorporates three objectives in relation to financial sustainability beyond the horizon of the project:

1. To identify and test new funding or income streams for the four Living Labs involved in the cross-border network
2. To create a sustainable business model for the combined Silver Economy innovation accelerator which is formed through the collaboration of the four cross-border Living Labs
3. To develop economic models which strengthen arguments for the fitting and retro-fitting of innovations related to ageing into current and new housing stock occupied by older people, supporting them to remain at home for longer. A strong business case will encourage government, local authorities and individuals themselves to consider investment (either private or public sector) of resources into these installations on a large scale.