



# SEAS 2 GROW

SILVER ECONOMY ACCELERATING STRATEGIES

## SILVER ECONOMY STAKEHOLDER NEEDS REPORT

Findings from stakeholder survey and needs finding workshops

Silver Economy Accelerating Strategies (SEAS) 2 Grow

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**Interreg**   
2 Seas Mers Zeeën

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## Executive Summary

This Silver Economy Stakeholder Needs report describes the rationale, methods, results and conclusions drawn from utilising 1. a cross-border, multi-stakeholder survey, and 2. needs finding workshops to collect views held by important [Silver Economy](#) (SE) stakeholders in the 2 Seas area (coastal areas of Belgium, France, England, and the Netherlands along the North Sea and the Channel). The views elicited from these stakeholders focus on the current and future states of [SE innovation](#), and the major similarities and differences in their expectations, capabilities, met needs and unmet needs. The results and conclusions are being used to inform the future direction and approach of the SEAS 2 Grow EU-funded project, which has the overall aim to accelerate the delivery of technological and social innovations for elderly people in the 2 Seas area.

The most significant results in this report are:

### Supply actors

- The profiles of SE supply actors do not vary significantly across the 2 Seas region – only in France is there a low sense of identification with the concept of “Silver Economy” as the majority of French suppliers responded that they are “unsure” whether they are part of the SE. One possible reason for this is that because government ministers in France established a formal Silver Economy according to a specific definition of the term, French suppliers are more judicious in their assessment than suppliers from other regions with looser interpretations.
- Complex and costly regulatory processes (for example in order to trial a product before CE marking) are impeding progress of innovations from prototype to revenue-making.
- Lack of budget is the most major barrier for Supply actors. Crowdfunding is a relatively novel tool for sourcing funds that they might wish to try. Supply actors at commercial readiness but receiving few sales are advised to look to successful companies in other sectors, e.g. AirBnB, for inspiration.
- French supply actors are most focussed in terms of SE product offering, perceived market barriers, and strategies that they use to overcome these barriers.
- UK supply actors offer the most diverse range of SE innovations; each individual company has a wider portfolio of solutions and they are the most enthusiastic to develop different types of products in the future. Like in France, the supply actors facing greatest barriers to accessing the market are those trying to sell to the public sector and institutions. UK supply actors are most active in trying to address these barriers.
- Belgian and Dutch supply actors offer a similar range of innovations and have similar approaches to try to overcome their barriers. Their barriers are quite different from one another however, with barriers in Belgian being more related to the public sector but barriers in the Netherlands being more related to consumers.
- French supply actors generally focus on supplying just one type of innovation, and have limited interest to supply other types of innovations in the future.

### Intermediary actors

- There are differences in the support services that intermediaries across the 2 Seas region offer – although nearly all types of support services are provided by at least one intermediary respondent in each region, the responses from the sample of intermediary actors who completed the survey indicates that there is greater prevalence in French intermediaries of “theoretical” services, but greater prevalence in UK intermediaries on “pragmatic” services.

- Intermediary actors are well-placed to strengthen the Silver Economy by recruiting and retaining talent to work in the sector.
- Supply actors are keen to receive mentoring from intermediaries, especially to co-develop business models, to receive assistance with preparation of persuasive and robust evidence of the cost-benefit case for an innovation, and to understand the potential value to be unlocked in the SE value chain. Equally, demand actors are keen to receive support that helps them identify, assess and select the innovation that best meets their needs. Intermediaries would have to rely on central government support to generate standardised tools for these purposes.
- Intermediary actors have the influence and reach to encourage greater export and import of innovative products, as well as international exchange of best practices, e.g. through international promotion, organizing exhibitions and fairs delivering a unified “regional” voice as to what the specific needs of that region are, inviting international delegations of governments and other relevant stakeholders from across the world, and collaborating with other nations to build a global “matchmaking” platform with comprehensive product directly for both supply and demand stakeholders to benefit from.
- Lack of funding is the major barrier stopping intermediaries across the 2 Seas region from reaching their potential to impact on the SE. France is the only country that sees supply actors as the most important source of this funding (through contracts from supply actors to provide them with business support services) – in the other regions there is balance with demand actors and the state generally.
- Local authorities have good understanding that many of the major barriers to supply and demand actors supplying/adopting innovations are finance-related. Intermediaries also have good understanding of some of the particular barriers facing supply and demand actors in their region specifically, e.g. public-sector challenges in the UK, but they lack specificity of understanding in other areas. This can in part be explained by their reliance on the media and official state reports for sector intelligence, as opposed to experiencing demand actor challenges first-hand.

#### Housing, health and care provider demand actors

- UK HHCs have different profiles to those from the rest of the 2 Seas region: they are more likely to be profit and therefore most persuaded by the potential for innovations to unlock productivity gains and returns on investment, and they are less integrated with other service types. Perhaps as a consequence of the combination of these two factors, UK HHCs are trying the greatest number of different strategies to overcome the barriers that prevent or complicate their adoption of innovations, both now and increasing in the future. They are also currently using innovations at a higher rate than HHCs in the other three countries.
- Conversely, Belgian HHCs appear to be the most integrated and, perhaps as a result, they are least active in trying to overcome barriers. They are, however, the most keen to increase the number of types of innovations that they adopt in the future.
- Lack of sharing of patient data, services and facilities between HHCs impedes transfer of knowledge and best practice between organisations. The fierce commercial competition existing between HHCs is impeding proactive data sharing. Strong central government intervention is required to provide this objective the impetus and incentives required to overcome this and other barriers.

- Belgian HHCs are also least likely to cater for elderly people with no physical or cognitive impairment, which implies that there is greater opportunity or expectation for independent living into old age.
- Acute health, digital literacy and smart clothing innovations are expected to increase in popularity the most amongst 2 Seas HHCs. Innovation types for which there have been solutions available for a long time (e.g. mobility, transport, physical activity and chronic health) are expected to see a slowdown in uptake by HHCs. This suggests that HHCs are not seeking to “upgrade” the traditional solutions they already use.
- The most frequently reported barrier to HHCs adopting innovations are finance-related. Interestingly, French HHCs report the narrowest range of barriers and with low frequency. Strategies growing in popularity are more pragmatic, “hands on” strategies, such as collaboration with suppliers in co-creation and trialling products.
- HHCs feel an important limiting factor to their adoption of innovations is perverse incentives in health and care systems, including (some) reimbursement for long-term care but not for innovations that prevent the need for this much more costly care.
- The priorities of HHCs across the 2 Seas region with regards to expected outcomes from adopting an innovation are universal: 1. Impact on service users, 2. Impact on staff, and 3. Impact on business. HHCs in France appear to value their staff more highly than elsewhere in the 2 Seas region.

#### Local authority demand actors

- Local authorities across the 2 Seas region are facing the challenges of an ageing population and they all acknowledge the need to increase their contacts with the Silver Economy in order to provide the optimal services for the emerging demography.
- There seems to be lingering presence of more reactive healthcare practices in France and the UK than in Belgium or the Netherlands, despite recent regulations aiming to move towards more preventative approaches.
- There are multiple interesting differences between local authorities responsible for smaller (<200,000) and larger (>200,000) populations. Smaller local authorities appear to be “closer to the people”, which affords them with more intuitive understanding of their needs, preferences and current behaviours and which makes them more likely to prioritise their population over other drivers and motivations. On the other hand, larger local authorities seem to be closer to political forces which place them under greater reputational pressure and more accountability (including with the media).
- Moreover, whereas larger local authorities seem to feel more confident in their capacity to innovate, they feel less knowledgeable on practical issues, e.g. when selecting an individual innovation to meet an articulated need.
- Overall there are fewest differences between local authorities from across the 2 Seas region than between the other stakeholders. Exceptions include that French local authorities are particularly proactive in trying to identify needs and adopting a wide range of innovations.
- Local authorities of all sizes and from all four 2 Seas countries are interested to explore shared risk and reward as a strategy to catalyse and facilitate innovative projects with supply and demand actors. There is doubt from some other actor types whether local authorities are in a position to engage in such potentially risky arrangements.

## Elderly and their informal carer demand actors

- The majority of informal carers are themselves approaching elderly age and yet relatively few of them identify with the term “Silver Economy”. Overcoming the reluctance of people approaching elderly age to consider innovations that can help them as they age can be achieved through marketing that empowers and enables rather than stigmatises someone as being “unable”.
- Greater access to the elderly could be achieved by raising their profile in the media and using grandchildren as “innovation advocates”.
- There are many interesting differences in the needs, views and behaviours of elderly people and informal carers:
  - The relative importance of mental health, informal communications and digital literacy innovations.
  - Elderly people are generally prompted to seek innovations because of internally generated convictions, e.g. unprompted reflection, including after an incident. Informal carers are more influenced by external stimuli, e.g. media and product marketing.
  - The potential of innovations to save time and costs are much more important to informal carers than the elderly, perhaps because they must juggle their caring duties with work and raising a family.
  - Elderly people are more persuaded by an innovation with the potential to help them retain their independence and increase their involvement in activities.
  - Carers see a greater number of barriers preventing or impeding their uptake of innovations than elderly people, but everyone identified cost as the leading barrier.
- In the UK, informal carers go online to seek advice on solutions to needs and are more likely to invest time and effort to improve their skills to be able to make best use of innovations, e.g. computer skills. In Belgium the situation is the opposite, suggesting that elderly people in Belgium feel more empowered to engage in digital activities.
- “Care libraries”, demonstration homes and appointment of local peer-led innovation champions can be effective at enabling citizens to “get in contact with” products – raising their awareness of what innovations are available, de-risking a purchase for them, and receiving the support they need to implement the innovations for greatest likelihood of utility.

## 1) Glossary

<b>Silver Economy (SE)</b>	Sector focusing on providing the aged population with products or services that improve their quality of life and support their independence
<b>Innovation</b>	A new 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: <ul style="list-style-type: none"> <li>• Health and care</li> <li>• Food</li> <li>• Household and personal equipment</li> </ul>
<b>Supply actor</b>	Companies responsible for developing and/or selling innovations
<b>Demand actor</b>	Individual, company or organisation using, commissioning or purchasing innovations. This should include: <ul style="list-style-type: none"> <li>• Housing, health and care providers</li> <li>• Local authorities and other local government organisations</li> <li>• Elderly people and their friends and family</li> </ul>
<b>Intermediary actor</b>	Individual or organisation supporting the development of the Silver Economy sector, such as regional development agencies, clusters, industry bodies, funders

## 2) Benefits to reading this report

Key ways in which Silver Economy stakeholders can hope to benefit from reading this report include:

### Suppliers of innovations for the elderly

- What are the current and future levels of interest of [housing, health and care providers](#), [local authorities](#) and [elderly people and their informal carers](#) across the 2 Seas region in innovations such as yours?
- What are the different barriers facing [housing, health and care providers](#), [local authorities](#) and [elderly people and their informal carers](#) to accessing innovations such as yours?
- What are the metrics that [housing, health and care providers](#), [local authorities](#) and [elderly people and their informal carers](#) in each country will use to judge the effectiveness and value-for-money of your innovation?
- What [types of support](#) are available in intermediary organisations in each country to help you with R&D, commercialisation and business development?

### Intermediary actors supporting innovations for the elderly (regional development agencies, clusters, industry bodies, funders, etc.)

- Where are the gaps in [intermediary service provision](#) amongst you and your partner / competitor organisations?
- Where do intermediaries in your region have correct or incorrect perceptions about the barriers facing [suppliers](#) of innovations, and [housing, health and care providers](#), [local authorities](#) and [elderly people and their informal carers](#) as demand actors of innovations?

- What are the metrics that [housing, health and care providers](#), [local authorities](#) and [elderly people and their informal carers](#) in each country will use to judge the effectiveness and value-for-money of the innovations that you are supporting?

### **Housing, health and care providers**

- What are the [innovations that competitor housing, health and care providers](#) have interest in currently and in the future?
- What are the [innovations that your elderly clients / residents / patients and their informal carers](#) have interest in currently and in the future?
- What are the types of [innovations available on the market](#) now and in the future?
- What are the [strategies that competitor housing, health and care providers](#) are using to overcome their barriers to access of innovations?

### **Local authorities**

- What are the [innovations that other local authorities](#) have interest in currently and in the future?
- What are the [innovations that your elderly population and their informal carers](#) have interest in currently and in the future?
- What are the types of [innovations available on the market](#) now and in the future?
- What are the [strategies that other local authorities](#) are using to overcome their barriers to access of innovations?

### **Elderly people**

- What are the [innovations that elderly people like you](#) have interest in currently and in the future?
- What are the [innovations that your informal carer](#) is likely to have currently and in the future?
- What are the types of [innovations available on the market](#) now and in the future?
- What are the [ways that elderly people like you are overcoming their barriers](#) to access of innovations?

### **Informal carers (friends and family) of the elderly**

- What are the [innovations that informal carers like you](#) have interest in currently and in the future?
- What are the [innovations that the elderly person you care for](#) is likely to have currently and in the future?
- What are the types of [innovations available on the market](#) now and in the future?
- What are the [ways that informal carers like you are overcoming their barriers](#) to access of innovations?

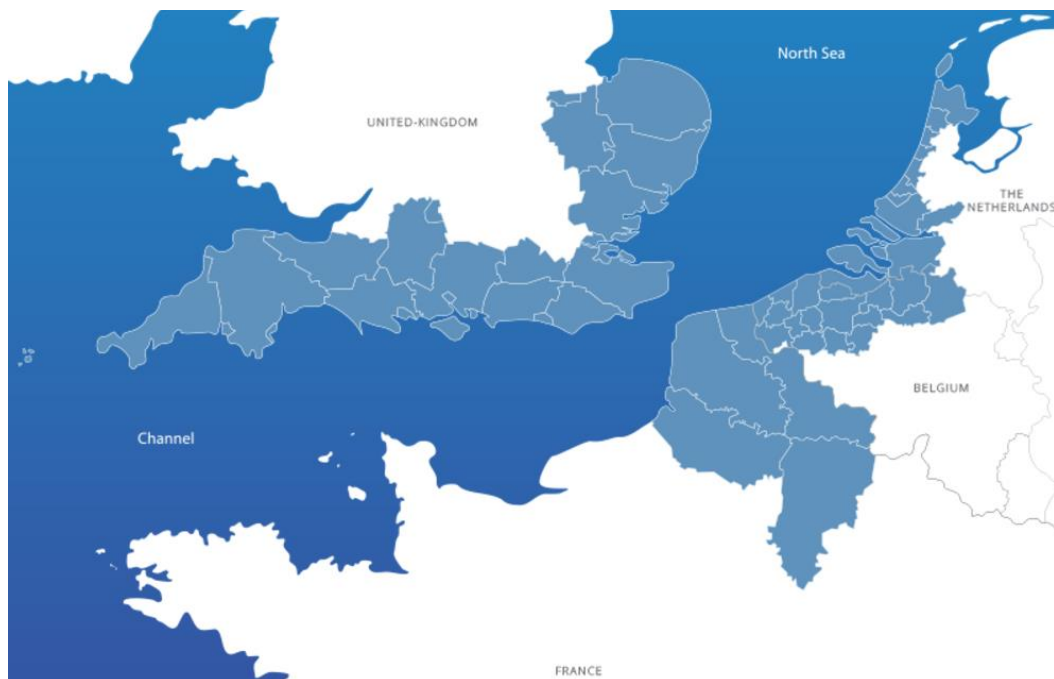


### 3) SEAS 2 Grow project background

The Silver Economy Accelerating Strategies (SEAS) 2 GROW project<sup>1</sup> is an Interreg 2 Seas<sup>2</sup> project part-funded by the European Regional Development Fund. Its fundamental aim is to provide new tools, methods and services that accelerate the delivery of technological and social innovations for elderly people in the 2 Seas area [Figure 1]. This shall be for the mutual benefit of all stakeholders in the *Silver Economy*, including companies, local authorities, housing, health and care institutions, and elderly people and their friends and family.

Project partners span each country in the 2 Seas region and are themselves different Silver Economy stakeholders with innovation-related motivations and expertise:

- Belgium: LiCalab (living lab for innovations in living and care and coordinator of Special Interest Group of HealthCare living labs worldwide)
- France: Clubstersanté (network of companies in the health sector promoting networking, mutualising and information sharing); Eurasanté (non-profit agency supporting technology transfer and business development of Life Sciences companies); La Vie Active (recognized public-interest organization supporting co-creation of innovations)
- England: Allia (not for profit organisation with expertise in property, enterprise support and business incubation centres); Anglia Ruskin University (academic institution with expertise in the technical, clinical, business and health and social care dimensions of SE innovations)
- The Netherlands: City of Alkmaar (local government organisation, with experience in home automation, ICT and e-health); Smart Homes (expert centre in home automation and smart living)



**Figure 1.** Interreg 2 Seas area (shaded in light blue), which comprises coastal areas of Belgium, France, England, and the Netherlands along the North Sea and the Channel.

<sup>1</sup> SEAS 2 GROW project website: <https://www.seas2grow.com/>

<sup>2</sup> Interreg 2 Seas programme website: <http://www.interreg2seas.eu/en>

To accelerate the development, marketing and adoption of innovation in the Silver Economy (SE) within the 2 Seas area, the partners are contributing to the SEAS 2 GROW project's three main work packages:

1. **Mapping** the current **SE Ecosystem** in the 2 Seas area, and defining a **Strategic Vision** for this sector
2. Creating a **Cross-Border Accelerator** to co-create and test SE innovations in the 2 Seas area
3. Designing and testing innovative **Funding and Financing Schemes** to support SE growth in the 2 Seas area, in particular related to the cross-border accelerator

#### 4) Introduction to Silver Economy Stakeholder Needs Analysis

**Major purpose of this report:** To better understand and highlight similarities and differences between each type of actor across the 2 Seas region countries, in order to prepare a common strategy to foster the development of Silver Economy innovations.

**Specific Objectives** to achieve this purpose:

- To crowdsource views on the current and anticipated future states of the SE across the 2 Seas region countries
- To better understand the similarities and differences between Supply, Demand and Intermediary actor expectations, capabilities, met needs and unmet needs, across the 2 Seas region countries

Two instruments were used to produce the content for this report:

- A. **Actor Surveys.** Questionnaires tailored to specific SE actor types (supply, intermediary and demand) were sent to stakeholders located in the 2 Seas region via each project partners' networks of contacts.
- B. **Needs Finding Workshops.** Face-to-face Open Innovation sessions attended by key SE stakeholders (e.g., companies, local authorities, health institutions, end users' associations) in each 2 Seas country.

This report details the methods used in each of the instruments above, as well as the results obtained. It aims at presenting a comprehensive description of the views held by important SE stakeholders on the current and future states of SE innovation in the 2 Seas area, as well as highlight the major similarities and differences in their expectations, capabilities, met needs and unmet needs. The conclusions are drawn from both the "big picture" view provided by the actor surveys, and the particular accounts of the stakeholders that took part in the needs finding workshops.

The current state of the SE market and current views of the SE actors described in this report serve as the basis for the formulation of a Strategic Future Vision for the Silver Economy in the 2 Seas area, to be produced as part of the SEAS 2 GROW project and published at a later date (<https://www.seas2grow.com/files/>). For a detailed description of the SE in each 2 Seas region, the reader is directed to the accompanying SEAS 2 Grow "Market Study" deliverable.

## 5) Methods

Two instruments were used to collect information and data on the views held by important SE stakeholders on the current and future states of SE innovation in the 2 Seas area, and their specific expectations, capabilities, met needs and unmet needs:

1. **Silver Economy Actor Questionnaires** were produced to collect a high volume of multi-stakeholder data. The questionnaires were tailored to specific SE stakeholder groups, namely supply actors, intermediary actors and demand actors, the latter being further subdivided into: Local Authorities and other Government Organisations; Housing, Health & Care Providers; and Elderly people and their Friends and Family. Questionnaires prompted actors to provide:
  - General and contact information
  - Quantification of their involvement in the SE Ecosystem
  - Ideas for innovation in the SE
  - Perceived barriers to innovation in the SE
  - Strategies to overcome barriers to innovation

Questionnaires were made available in both paper format and via an online platform (SurveyMonkey®), and distributed to as many stakeholders as possible via the formal and informal networks of the SEAS 2 GROW project partners. French versions of these paper and online questionnaires were also made available for French stakeholders. French equivalents for specific terms that are not applicable to the situation France were included where necessary.

Interested readers can view the SurveyMonkey questionnaire in preview mode ([https://www.surveymonkey.net/r/Preview/?sm=0qVZBe9UZ5B3XEaWpRKi\\_2F93\\_2FpD1z7XK\\_D0u2Zir\\_2BifBJTPFuwDgU1HuGC61b2Hvt3](https://www.surveymonkey.net/r/Preview/?sm=0qVZBe9UZ5B3XEaWpRKi_2F93_2FpD1z7XK_D0u2Zir_2BifBJTPFuwDgU1HuGC61b2Hvt3) for the questionnaire in English).

To ensure balance across the 2 Seas regions, indicative targets were set on the number of responses each region should endeavour to receive by stakeholder type. The tables below present the final number of responses achieved by country [Table 1].

**Table 1.** Actor survey responses segmented by country.

Actor Type		UK	Netherlands	France	Belgium
<b>Supply</b>		22	13	15	23
<b>Demand</b>	Housing, health & care providers	6	5	11	7
	Local authorities	4	4	2	7
	Elderly people	2	0	0	8
	Informal carers	5	0	0	2
<b>Intermediary</b>		11	7	14	6
<b>Total</b>		50	29	41	53

The only processing of the data carried out before analysis was reverse translation of the French surveys into English, to ensure consistent analysis across all responses.

These responses were plotted in either the native Survey Monkey environment or in Excel. All plots are available in the Supplementary Material (see [Section 8](#) for signposting), which the reader is advised to consult in parallel with reading this report. The most important findings are summarised in the Results [Section 6](#).

2. The second instrument used to assess Silver Economy stakeholder views were [Needs Findings Workshops](#). These sessions, which took place in each of the countries present in the 2 Seas area, gathered several dozens SE stakeholders in small groups (“round-tables”) to share views and promote discussion on different aspects of Silver Economy innovation. **Table 2** presents the number of stakeholders who attended each workshop. Individual stakeholder opinions, including particular consensus and points of divergence, were recorded during the sessions and reported across the SEAS 2 Grow project team. The following Results Section 6 identifies those instances where the survey analysis was consistent or at odds with the findings from these workshops.

**Table 2.** Needs Finding Workshops by country.

	<b>Belgium</b>	<b>France</b>	<b>The Netherlands</b>	<b>United Kingdom</b>
<b>Date and Place</b>	10 <sup>th</sup> October 2016, VOKA Kempen (Chamber of Commerce), Geel	17 <sup>th</sup> January 2017, Bio Incubateur Eurasanté, Lille	19 <sup>th</sup> January 2017, Smartest Home, Alkmaar	16 <sup>th</sup> January 2017, Anglia Ruskin University, Chelmsford
<b>Number of Participants</b>	54	29	18	35

## 6) Results Preamble

An interesting phenomenon arising from the survey [method](#) (as opposed to the survey [results](#)) was that some survey respondents reported difficulty in selecting what type of actor they were (supply, demand or intermediary), despite the help of the Glossary and specific examples. For many of these respondents, the reason behind this confusion stemmed from their association to organisations with multiple roles or responsibilities. For example, particularly innovative care homes that develop and manufacture innovative products to meet the needs of their residents in-house saw themselves as supply actors. This was also true for those care homes that had won contracts to deliver public services, e.g. telecare monitoring and response services. In fact, there was a surprising number of HHCs who did not identify at all with the term “Demand actor”. There was also variation in the identification of local authorities with the term “Demand actor”; unsurprisingly, individuals with a role more aligned to seeking and procuring products did identify with the term, whereas individuals with a role more focussed on public education and awareness-raising or supporting engagement of supply actors with its procurement departments felt greater identification with the term “Intermediary actor”, and those with roles most focussed on providing products to end-users identified more strongly with the term “Supply actor”.

The survey responses discussed in this report are those responses made according to the respondent’s decision on which type of actor they are. This means, for example, that respondents from local authorities who major in providing products to end-users completed the survey as a Supply actor. The responses from “Local Authorities” discussed in this report are actually limited to those respondents from local authorities who have a more demand-like role.

A second noteworthy comment on survey method relates to the common challenge faced by the project partners from all four of the 2 Seas countries to persuade certain actor types to complete the survey. The actors that were least likely to complete the survey when requested were local authorities and elderly people. One reason for this is that online surveys are not the typical way for these stakeholders to engage in research. Had more resource been available for this project, other activities might have sourced information from more of these actors.

## 7) Results

All results discussed below are naturally subject to sample size biases, especially in those stakeholder groups where it was particularly challenging to engage stakeholders to complete the survey or to attend a workshop. The reader is asked to bear this in mind when considering the implications of these findings.

### a) Stakeholder profiles

#### i) Supply actors

75% of Supply actors considered themselves to belong to the “Silver Economy”– 100% of suppliers in the Netherlands [Table S1]. Interestingly, this sense of belonging was considerably lower in France than in the other 2 Seas countries, and is not proportional to the level of focus of the company on the SE market only. One explanation for this is that French suppliers are more judicious when assessing their belonging to the SE than suppliers from other regions because of the existence in France only of a formal Silver Economy according to a specific definition.

Supply actors with decreasing or greatly increasing focus on the SE market were more likely to report having insufficient SE contacts than suppliers maintaining or only marginally increasing their focus on the SE [Table S2]. An executive decision to reduce focus on a market may be as a cause of insufficient contacts, and successful initiatives to strengthen their SE network may lead them to reverse their decision, for the potential betterment of the SE as a whole.

Suppliers in France and Belgium are planning to make more major shifts in the extent to which they focus on the SE market compared to other markets than suppliers in the UK and the Netherlands (note the greater variability of datapoints in the French and Belgium plots in Figure S1).

New companies seem to be more open to shifting their target customer segment(s) to and or away from the SE than more established companies who may have already identified the optimal business model for them in previous years / decades. This trend was consistent across all 2 Seas countries [Figure S2].

Companies with viable SE business models can expect to grow over the years, i.e. the SE can present good prospects for new supply actors in each 2 Seas country [Figure S3].

There is no trend between supplier age and the strategies that they use to ensure their innovation meets the needs of the elderly. Overall, developing partnerships with SE incumbents and co-creating and communicating with the elderly are the major strategies used in the 2 Seas region. Few companies recruit specialist staff to gain the knowledge or expertise – particularly so in France [Figure S7]. This creates a clear opportunity for intermediaries with specific expertise, such as living labs, to add real value to companies of all ages, which was highlighted in the Belgian needs finding workshop. Dutch needs finding workshop delegates suggested that the sector be more proactive in

attracting and retaining innovation talent, including from other sectors – a role perhaps for intermediaries.

The most common sales relationships reported by supply actors across the 2 Seas region are: 1. the combination of B2B, B2C and B2B2C; 2. B2B only (particularly popular in Belgium); 3. the combination of B2B and B2C. Suppliers with B2C-only sales relationship was not reported by any French suppliers [Figure S4].

## ii) Intermediary actors

The more an intermediary actor focuses on the SE (compared to other sectors such as health generally, functional foods generally, etc.), the more likely it is to feel membership to the SE [Table I1].

Intermediary actors across the 2 Seas region who plan to increase their focus on the SE feel least confident that they have the necessary contacts to do so [Table I2].

There is a common trend across the 2 Seas countries for intermediaries currently less specialized in the SE to increase their focus on this market, i.e. to specialize their business, but for intermediaries currently more specialized in the SE to decrease their focus, i.e. to diversify their business to other sectors. This parabolic relationship between current and future SE specialization is most apparent in the Netherlands and particularly Belgium [Figure I1].

Following on from this finding, it is interesting to note that intermediaries in the 2 Seas region generally decrease their focus on the SE (or diversify their offering) as they age. This trend is particularly pronounced in Belgium. The exception is in the UK where specialization generally increases with age [Figure I2]. This suggests that there is greater opportunity and need for intermediaries to support the SE in the UK than in the other countries (perhaps because there is more established competition in the other countries).

Intermediaries with an interest in the SE generally grow as they age, suggesting that there is good prospect for those intermediaries with viable business models to flourish as catalytic and facilitating supports of the SE. However, there are a number of SE intermediaries in the UK and Belgium which struggle to grow beyond a dozen employees even after many years, suggesting that the barriers facing the supply and demand actors in these countries can have critical consequences for intermediaries too [Figure I3].

It is interesting to note that Dutch intermediaries seem to offer a broader range of services than intermediaries in the other regions, although none of them reported offering expertise on export. Export is the service that is weakest across all the regions [Figure I4]. Delegates attending the Belgian needs finding workshop suggested ways to overcome this, including international promotion, organizing exhibitions and fairs delivering a unified “regional” voice as to what the specific needs of that region are, inviting international delegations of governments and other relevant stakeholders from across the world, and collaborating with other nations to build a global “matchmaking” platform for both supply and demand stakeholders to benefit from.

Although nearly all types of support services are provided by at least one intermediary respondent in each region, the survey results suggest there is greater prevalence of “theoretical” support services on offer from French intermediaries (services related to policy, commercialisation, funding applications and business modelling) whereas there is greater prevalence of “pragmatic” support services from intermediaries in the UK and Netherlands. Anecdotal evidence suggests appetite from demand actors in France for more pragmatic services such as living labs. Belgium lies midway in the

theoretical – pragmatic space, with particular excellence in managing commercial partnerships [Figure I4].

### iii) Demand actors

#### (1) Housing, health and care providers

The vast majority (80%) of housing, health and care providers (HHCs) in the 2 Seas region are not-for-profit. The countries in which HHCs are most likely to be for profit are the UK and the Netherlands [Table H1]. This agrees with the observation made in the SEAS 2 Grow “[Market Study](#)” that privatization of the health and care systems appears more prominent in the UK and the Netherlands than in Belgium or France.

Unlike in other actor types, there is no clear trend between the extent to which HHCs across the 2 Seas region identify with the concept “Silver Economy”, and the extent to which their services are targeted at the elderly. The only country in which the trend was as expected (HHCs with most business derived from the elderly having feeling greatest affinity to the Silver Economy) was the UK. Overall, HHCs in Belgium reported greatest sense of membership to the Silver Economy [Table H2].

HHCs that do feel a sense of belonging to the Silver Economy were more likely to report the need for greater contacts with the Silver Economy than HHCs who did not feel this belonging [Table H3].

The HHC results described in this report represent the views of a wide array of housing, health and care providers [Figures H1, H2, H3 and H4]. It is interesting to note that the UK was the only country from which no responses were collected from organisations providing all three types of service (housing, health and care services). It might be inferred from this that there is greater separation of these services in the UK than elsewhere in the 2 Seas region. Conversely, Belgium had a large number of combined housing, health and care providers complete the survey, from which it too might be inferred that these services are more integrated in Belgium [Figure H1]. Nevertheless, stakeholders attending the Belgian needs finding workshop identified lack of sharing of patient data and services and facilities as significant unmet needs. This can be reconciled with the previous result by hypothesizing that HHC services in Belgium are more vertically integrated (i.e. across providers of different types of services, e.g. housing, health and care) than horizontally integrated (i.e. between providers of the same type of service, e.g. between different care providers). The workshop delegates explained that this situation is particularly acute when comparing large and small care providers, as these two groups of care providers use very different administrative processes. They identified numerous benefits to greater care provider collaboration, including stronger buyer position (supplier agreements based on economies of scale) and knowledge exchange and experience sharing for mutual service improvement. Dutch needs finding workshop delegates suggested that integration of allied services will only be achieved once the different protocols that they use to collect and store data and their different financial arrangements are aligned. They identified an authoritative central government organisation as needing to lead such a complicated transformation, although the bureaucracy that this would involve was a matter of concern for UK workshop delegates. French workshop delegates highlighted the challenges associated with information governance and data security in data-sharing innovation such as this. They recommended the French “Maia” scheme of methods for addressing the practical issues associated with integrating health and care services for elderly people at a local level. These methods focus on dialogue between all actor types and sharing of data by all actors residing within the circles of care of an elderly person in order to facilitate cooperation.

There seems to be greater provision of HHCs dedicated to the elderly in the Netherlands and France than in the rest of the 2 Seas region [Figure H3].

Of those HHCs catering exclusively or mostly for the elderly, the average age of their clients / residents / patients peaks between 76 and 90. It is difficult to tell from the small number of samples provided by the survey whether this mean age differs between countries [Figure H5].

We can confidently accept that our HHC survey was completed by HHCs catering for a wide range of client / resident / patient levels of need; providers across the four countries each cater for a wide range of needs. The only exception to note is that few HHCs from Belgium reported catering for people with no impairment, from which it can be inferred that this population is more likely to be living independently in Belgium than elsewhere in the 2 Seas region [Figure H6].

Across the four 2 Seas countries, it is the need for HHCs to increase their competitiveness with competing HHCs that is their driving motivation for adopting innovations. In fact, 100% of HHCs in the UK and France identified with this motivation [Figure H8]. This is consistent with the feedback from the Belgian needs finding workshop that it would be difficult for some HHCs in Belgium to collaborate on development of a common patient data platform (a solution independently identified by Dutch workshop delegates) because of fear that this could reduce their competitive advantages – a barrier independently identified by French workshop delegates. They highlighted that it would be particularly difficult to negotiate the collaboration of for-profit and not-for-profit HHCs, as some of their approaches and mentalities are quite divergent.

Financial pressures were the second most frequently reported reason for HHCs to consider adopting innovations. Acting on feedback from clients / residents / patients and their circles of care (friends, family), whether prompted by the HHC (e.g. in satisfaction surveys) or not, and reacting to incidents were the next most cited reasons for HHCs to identify that solutions to unmet needs were required.

According to the survey results (which are relatively small in number), major differences in the strategies used by HHCs to identify unmet needs across the 2 Seas region include: very limited (or even no) horizon-scanning by French HHCs, e.g. proactive attendance at conferences, desktop research and general brainstorming; high levels of co-creation catalyzed identification of unmet needs, either proactively sought by the HHC, facilitated by intermediaries such as living labs, or through direct advances from suppliers; a high level of reactive change after an incident, e.g. high rates of falls, in the UK; and relatively low levels of response to prompted and unprompted feedback in Belgium [Figure H8].

## (2) Local authorities

Whether a local authority in the 2 Seas region identifies with the concept “Silver Economy” or not seems to be independent of the age demography of its population [Table L1]. However, regardless of whether a local authority considers itself a member of the Silver Economy or not, they all wish to build new contacts with Silver Economy stakeholders [Table L2].

For the purposes of relevance of results and conclusions in this report to a wide range of local authority types, it is fortunate that local authorities of all sizes completed the survey (from those with populations of tens of thousands to those with populations of greater than one million). It seems that there is greatest variation in local authority size in Belgium [Figure L1]. Despite these differences of scale, what all but one local authority survey respondents have in common is an ageing population [Table L3].



It is interesting to compare the differences in which factors help different sizes of local authorities to identify unmet needs – factors including adverse incidents such as a fall, unprompted and prompted feedback, horizon scanning such as attending trade fairs, and financial and reputational pressures. Larger local authorities seem more likely than smaller local authorities to consider implementing or supporting innovations that meet needs raised via the media and other sources of public service review, and prompted service user feedback (e.g. local population service user satisfaction questionnaires) [Figure L2]. This suggests that larger local authorities feel greater public exposure and accountability, and conduct formal, planned activities to understand their populations. It would seem that smaller local authorities rely on closer relationship with their populations in order to understand them.

Looking at differences between countries, the survey results suggest that local authorities in France and the Netherlands face the strongest financial pressures, or at least are most concerned by them. Adverse events are triggers for local authorities particularly in the UK and France to identify unmet needs, suggesting that health, care and housing services in these countries are still more reactive in their approach than preventative, despite recent adoption of new laws and regulations aiming to overcome this more short-term approach in these two countries (such as Loi d'adaptation de la société au vieillissement (AVS), or Adaptation of Society to Ageing, in France, and the Five Year Forward View in the UK). The need for more preventative measures was identified in the UK needs finding workshop as being a significant unmet systemic need, although it was appreciated that this must be balanced with the competing need for resources to manage the crises that healthcare providers face every day, e.g. hospitals responding to serious incidents – situations worsened by reactive approaches, but nevertheless necessary to deal with on a daily basis. Delegates suggested ringfencing budgets for transformations such as adoption of new preventative-focused innovations as the best solution.

Overall, French local authorities appear to be most active in trying to identify unmet needs in their populations as both respondents already use nearly all of the methods. This is in contrast to in Belgium where only roughly half of local authorities use each method [Figure L2].

### (3) Elderly people and their informal carers

It is unsurprising that the majority of the elderly people who completed the survey were concentrated in the younger of the elderly age range (between 65 and 80), and therefore perhaps were able and confident to complete an online survey [Figure E1], whereas the ages of the elderly people being cared for by a friend or family member spanned up to 100 years old [Figure E3]. The ages of the informal carers completing the survey were concentrated in the 41 – 64 years old range, meaning that many of them are themselves approaching their elderly years [Figure E2]. Putting the caring duties of these “baby boomers” aside, it is perhaps surprising that only half of them identify with the concept “Silver Economy” given that they must already have plans for their retirement [Table E2]. It is perhaps indicative of the fact that the age at which someone feels elderly is continuously increasing, and/or, as highlighted at the Dutch needs finding workshop, end-users are reluctant to face their own needs, particularly those related to a situation in the future where they may be less able. The delegates suggested that this could be overcome with better marketing to help potential future customers realise that the purpose of innovations is to empower and enable, not to stigmatise someone as being “unable” – a message independently echoed by French workshop delegates. Examples could be to label an innovation as a “gadget” rather than as a “care technology” and with benefits to “wellbeing” rather than health or care, adding a gamification dimension to

innovations, and appealing to the elderly person's wider but more technologically literate circle of care, e.g. grandchildren – a strategy also identified by UK workshop delegates.

Most elderly people living alone seem either to be in good health or receiving a high level of care – both informal (from friends and family) and formal (from care workers) [Table E1].

The number of hours that informal carers provide care seems to follow a bimodal distribution with peaks at <10 hours/week and >21 hours/week. This suggests that informal carers choose either to provide a low level of care so that they can fit it around work and their own family life, or they make the decision to give up (full-time) work in order to provide a high level of care [Figure E4]. The geographical distance between the homes of elderly people and their informal carer(s) appears to be generally less than 10km. In the UK, they are all 5 – 10km apart, suggesting that this is a manageable distance for fulfilling caring duties whilst allowing both elderly people and their informal carers to retain a sense of independence [Figure E5].

It is interesting to observe the differences between the strategies used by elderly people and their informal carers to identify unmet needs: elderly people are most influenced by their personal experiences, e.g. unprompted internal reflection, including in response to an incident, whereas their friends and family are more susceptible to other cues, e.g. media coverage on an issue facing the elderly and product marketing [Figures E9 and E10]. UK workshop delegates listed TV campaigns, social media and billboards marketing to the masses as the ideal vehicles for awareness raising. In the past, charities such as Age UK have had good success championing these types of initiatives in the UK (see SEAS 2 Grow "[Market Study](#)").

Finally, the opportunity for an innovation to save time and cost is more persuasive to informal carers than the elderly person, perhaps because informal carers must juggle other responsibilities, e.g. work and raising a family with their caring duties [Figures E9 and E10].

## b) Ideas for innovation

### i) Supply actors

The innovation types currently offered by the highest numbers of suppliers in the 2 Seas region seem to be related to activities of daily living (high in all four countries), acute health (particularly high in the UK and Belgium), cognitive impairment (particularly high in the UK), and informal communications (particularly high in France). The innovation types which are currently supplied by a limited number of suppliers in the 2 Seas region include innovations related to swallowing, transport and smart clothing. Supply of innovations related to eating and drinking is generally low.

UK suppliers manufacture and sell the largest number of innovations per company. These innovations follow quite a unique distribution, being particularly prevalent in the areas of cognitive impairment, chronic health and acute health, and high numbers of hydration and nutrition innovations, relative to the levels in the other three regions. The reason for the high prevalence of health-related innovations in the UK might be because of the well-known shortages in the UK of acute health and care services, including of doctors, care workers and hospital beds making remote healthcare (telecare, telehealth, etc.) and self-management (supported by technology) necessary solutions. The opportunities created by these pressures on health and care services was something raised many times in the UK needs finding workshop.

The patterns of prevalence of all innovation categories in Belgium and the Netherlands are quite similar (only really the high prevalence of acute health innovations in Belgium differentiates them),

but the pattern in France is quite different. Overall, French respondents indicated that there is a more limited range of innovations emerging from France than the other regions. No French survey respondents indicated that they currently or plan to supply fitness, incontinence, hydration, nutrition, swallowing process, digital literacy or personal transport innovations. In none of the other 3 countries was there even a single category of innovation not already being supplied, or plans drawn up to supply it in the future.

Moreover, the survey results indicate that French supply actors do not plan to expand their product line as much as their counterparts. The country in which suppliers have greatest diversification aspirations for the future is the UK. Innovations related to mental health, cognitive impairment, activities of daily living and smart clothing are particularly expected to grow in popularity amongst UK suppliers in the future.

Innovation types not expected to receive much new interest from suppliers across the 2 Seas region include digital literacy, transport, swallowing and nutrition (especially outside the UK). There could be multiple explanations for this, including lack of perceived demand, challenges to invent innovative new solutions that meet these specific needs, or established and satisfactory availability of traditional solutions.

**[Figure S6]**

## **ii) Intermediary actors**

Intermediaries across all 2 Seas countries seem to see value and promise in a wide range of innovations for the elderly; each category of innovation was selected by at least 2 intermediary survey respondents in each region as being of current or future. The innovation types that are currently being supported by the largest numbers of intermediaries across the four countries are cognitive impairment, informal communications, chronic health and acute health. The innovation types with lowest levels of current support are hydration, transport, swallowing and incontinence. However, all of these innovation types, and particularly incontinence and hydration, are expected to gain considerable intermediary support in the future. The other innovation types expected to greatly increase in intermediary support in the future are mental health, nutrition and smart clothing innovations.

Belgian intermediaries have the strongest track-record for supporting a wide range of innovation types (all apart from hydration innovations), limiting their opportunity to widen their areas of interest in the future. The innovation types expected to grow in intermediary support the most in Belgium are hydration, recreation and leisure and smart clothing.

France is the only country in which all innovation categories were reported to already be supported by intermediaries, albeit at low numbers. This suggests a coordinated approach by French intermediaries to allow them to specialise in certain innovation types whilst in concert still cover a wide range of innovation types. It appears that this situation might change in the future as French intermediaries expect the range of innovations that they support in the future to increase more than in any other country.

The ranges of innovation types that UK and Dutch intermediaries are currently and planning to support in the future are quite similar: there are certain innovation types with currently low levels of support from intermediaries (e.g. incontinence, swallowing and transport in the UK, and nutrition, swallowing and mobility in the Netherlands) and others with currently high levels of support (acute health, physical activity and mental health in the UK, and cognitive impairment and informal

communications in the Netherlands). The countries are also similar in that there is little correlation between current and future levels of interest in each innovation type: there are some innovation types with currently low levels of interest that will remain that way (e.g. smart clothing in the UK) whereas others will increase a lot in the future (e.g. incontinence in the UK and smart clothing in the Netherlands).

The differences in these trends between the countries highlights the uniqueness of the supply and demand situations in each 2 Seas region.

**[Figure I5]**

### **iii) Demand actors**

#### **(1) Housing, health and care providers**

The categories of innovations most commonly used or promoted by HHCs across the 2 Seas region today are cognitive impairment, mobility and informal communications. All remaining innovation categories have a relatively similar popularity except for smart clothing and digital literacy, which few HHCs are currently using or promoting. It is interesting to note the paucity of interest in HHC interest in innovations related to eating and drinking.

Overall, there are few types of innovations that are expecting more than 100% increase in popularity in the future (i.e. to more than double their current market size); notable exceptions include acute health, digital literacy and smart clothing innovations (for which 113%, 160% and 600% increases are expected, respectively, e.g. from 1 HHC currently to 6 more in the future in the case of smart clothing). Innovation types for which popularity amongst HHCs in the 2 Seas region is expected to wane include mobility, chronic health, physical activity and transport innovations.

It should be reassuring to suppliers of all types of innovations that there is current and/or future interest in every single innovation type from at least one HHC in each country, i.e. this demand actor population sees value in a wide range of innovations. However, only informal communications innovations were selected by 100% of HHC respondents from a single country (France) as being of current and / or future interest – for all other innovation types only a fraction of available HHCs are interested in each innovation type.

UK HHCs have the highest current rates of innovation uptake, albeit concentrated in certain categories (such as chronic health, mobility, cognitive impairment and incontinence). Few UK HHCs who are not currently using a type of innovation plan to do so in the future, the only exception being innovations related to digital literacy but with modest increase. Little growth in popularity of new innovation types is expected in Dutch HHCs too. On the other hand, Belgian HHCs are keen to increase their uptake of new types of innovations in the future. Innovation types expected to particularly grow in popularity amongst Belgian HHCs include acute health, mental health, and informal communications innovations.

**[Figure H7]**

#### **(2) Local authorities**

There is high rate of uptake and support of most categories of innovation by local authorities across the 2 Seas region. The major exceptions are smart clothing and digital literacy. Innovations such as

these that have received low interest from local authorities in the past are not expected to increase in popularity in the future.

Highest uptake of number of categories of innovations per local authority appears to occur in France. The high current rate of adoption leaves little room for growth in the future (the exception being digital literacy, which is expected to grow considerably). Although the relatively low current level of adoption of innovations by UK local authorities allows for significant increase in the future, the UK survey respondents did not indicate that they expected this to occur.

The greatest increase in uptake by local authorities is expected in Belgium, particularly in the innovation categories of acute health, activities of daily living, informal communications and transport. Dutch local authorities indicate they are most likely to increase adoption of innovations related to cognitive impairment in the future.

**[Figure L3]**

### **(3) Elderly and Informal carers**

Despite the low number of survey responses, it is possible to tell from the survey results that there are differences in the types of innovations that elderly people and informal carers (when considering innovations that would help them in their role as carers) would deem useful. For example, it seems that the importance of informal communications technologies (including social media) and digital literacy tools for the elderly, for keeping in contact with friends, family and society, is not fully appreciated by informal carers. Their importance was independently raised at the UK needs finding workshop, however.

Similarly, innovations related to mental health are not of interest to elderly people (or, at least, they do not admit so), but they are of interest to their friends and family. Of all the types of innovations suggested by UK needs finding workshop delegates as having the potential to meet significant need, innovations related to loneliness and poor mental health, including tools for detection of malnutrition, physical shutdown and reduced mental wellbeing were identified three times as frequently as the next most often cited innovation types (security and safety, and cognitive decline). The benefits of innovations related to the detection and management of cognitive decline were deemed to be greatest for informal carers, but it was felt that low uptake, for whatever reason (see “Barrier to innovation: Elderly and informal carers” section), is leaving many informal carers with significant unmet needs today.

Overall, it would seem that elderly people in both the UK and Belgium use only a small number of innovations each. This is consistent with the issue of awareness raising discussed in the Belgian needs finding session; it was proposed that a digital platform showcasing all available products would be beneficial in Belgium. Dutch needs finding workshop delegates also identified need for such a platform, and particularly one that facilitated the matching of supply and demand. UK needs finding workshop delegates highlighted the need for such a platform to be succinct rather than overwhelm the user with lots of options – too much information can be as problematic as too little when choosing a solution; what a user needs to know if which solution(s) are best for my needs. They suggested that local authorities would be best placed to create such a platform.

Comparing the situations in the UK and Belgium, it is striking to notice the relatively low uptake of innovations by informal carers in the UK today. Interestingly, because of awareness raising through the survey activity or otherwise, informal carers in the UK reported being keen to increase their

uptake in the future. This might also be because they foresee greater need for support and tools in the future, as the person they care for declines with age.

[Figures E7 and E8]

## c) Barriers to innovation

### i) Supply actors

It would appear that not one type of Supply Actor company selling to a specific customer type consistently faces more barriers than the rest across the four countries. For example, French companies selling B2B; Belgian companies selling B2B2C; Dutch companies selling B2C and British companies selling B2B and B2B2C all appeared to feel a bigger brunt of these barriers than the remaining customer types. This reveals that each country is highly unique with regards to the degree that these barriers impact targeting different audiences.

It may be surmised, however, that suppliers in the UK and France targeting public sector and business buyers face more challenges than those targeting individual consumers. This agrees with the fact that the top barriers reported by UK suppliers relate to the public sector (fragmented, complicated, unintegrated and uncollaborative), and in France the challenge of B2B businesses to find institutional buyers. Overall, French supply actors report fewer barriers than suppliers in the other regions, with none reporting lack of market fit, lack of integration and shared working of public sector or lack of dedicated budget, teams, processes and skills as barriers.

On the other hand, in Belgium and the Netherlands it is B2B2C and B2C suppliers who report the greatest barriers, suggesting that suppliers in Belgium and the Netherlands targeting individual consumers as the final end-user face more challenges. Slow adoption of innovations by stakeholders was one major barrier in common (with France as well). The remaining major barriers reported by Belgian suppliers were lack of internal budget / funding (in common with UK suppliers) and skills, and lack of business buyers and integrated public services for B2B2C companies. This is consistent with the fact that Belgian stakeholders identified a lack of understanding of the mandatory regulations for selling to the public sector as an important need in the Belgian needs finding workshop, suggesting that this can be a complicated and protracted process for those relying on public service providers in their value chain, e.g. as an intermediary buyer, for on-sell to consumers. Dutch companies also listed finding consumer buyers as one of their major barriers. Delegates attending the Belgian needs finding workshop recommended more flexible regulations for piloting activities in controlled environments as being potentially very beneficial for a supplier needing to undertake “lean” R&D because of limited time and funds before sales can be made (when attainment of full regulations is necessary). UK workshop delegates might have felt that this would be one good solution to overcome the barrier that they identified for supply actors of high expense to move from working prototype to revenue-making market entry.

Overall, however, the barrier most frequently cited by Supply actors from across the 2 Seas region and with any sales relationship was lack of budget or funding. Belgian and UK delegates attending the needs finding workshops suggested crowdfunding as novel way for suppliers to overcome this issue. French workshop delegates discussed the option for supply actors to provide their innovations on a lease arrangement, rather than as a full sale, as a way to overcome cashflow problems and to manage risk of the innovation not delivering the benefits they would hope – a benefit identified by UK workshop delegates.

Belgian workshop delegates also suggested that state-funded resource be made available to mentor start-ups with the main aim to ensure that their business model is sensible and optimal for the business in question. Mentoring of start-ups by large, established companies was one arrangement suggested, reminiscent of the “Big B 2 SME” project co-financed by a local authority in the UK and run by the South East Health Technologies Alliance in the UK.

In the Netherlands, needs finding workshop delegates raised the need for supply actors to better understand the needs and desires of healthcare insurance companies as customers, as they are a potentially excellent route to market but requiring specific evidence of business potential. They also highlighted the growing opportunity for selling direct to consumers rather than to other businesses, particularly in those countries such as the Netherlands where care services are becoming increasingly financed by private individuals.

In the French needs finding workshop, the difficulty of delegates to answer “Who pays?” for each specific innovation considered highlights that identifying the optimal business model for an innovation and company is far from straightforward. They recommended that companies analyse successful business models in other sectors for inspiration, e.g. Airbnb. They also emphasized the need for supply actors to build compelling cost-benefit arguments to attract buyers, preferably based on first-hand evidence of outcomes and other data. UK workshop delegates recommended that governments and academic institutions collaborate to create guidance for supply actors in how to produce robust and persuasive cost-benefit evidence.

Moreover, French workshop delegates considering the case study of how an air purification innovation could transition from one target customer to another recommended that supply actors should not underestimate the challenges of complying with all the different regulations existing for different customer groups when considering targeting a new customer group, e.g. safety and sterilization standards in hospitals compared to in care homes. The optimal situation is obviously to conduct significant market research before and during initial R&D to ensure the relevant standards for all intended customer groups are adhered to, rather than trying to retrofit or adapt the product later on for different markets.

**[Figure S8]**

## **ii) Intermediary actors**

Lack of supply, demand and state funds were the major reasons barriers identified by intermediaries for limiting their potential impact on the SE. It is interesting to note that French intermediaries were the only ones not to consider lack of state funds as a hindrance, indicating perhaps that financial support from the state in France is relatively generous (although anecdotal evidence suggests that this situation is changing). French intermediaries appear to feel that it is limited supply actor budgets that is the major source of financial difficulties for intermediaries, which could either indicate that French supply actors generally have less disposable income than supply actors in the other 2 Seas countries, or that there is less expectation in France for other stakeholder types (namely demand actors) to invest in their support services.

A major barrier identified by Belgian and French intermediaries only was low awareness of demand and supply actors of their organisation as an intermediary who can support them. This is a surprising result given that the Silver Economies in Belgium and France are arguably more visible than those in the UK and the Netherlands (see SEAS 2 Grow “[Market Study](#)”).

**[Figure I6]**

### iii) Demand actors

#### (1) Housing, health and care providers

Finance-related barriers are most frequently cited by HHCs across the 2 Seas region as preventing or complicating their adoption of innovations. External funding was selected as the most significant barrier to HHC providers in France, The Netherlands and the UK, and lack of internal funding as second or third most significant barrier, whereas this situation was reversed for HHCs in Belgium. Possible reasons for this include that either HHCs in Belgium already feel more financially supported by external sources (such as local authorities) than their French, UK and Dutch counterparts, or that there is a greater expectation in Belgium for HHCs to be self-sufficient. Lack of potential for return-on-investment was the third finance-related barrier suggested to survey respondents but it was only really in the UK that HHCs identified it as a significant barrier (on par with lack of internal funding). This agrees with the earlier observation that the UK is the country with highest prevalence of for-profit HHCs [Table H1].

Dutch and UK needs finding workshop delegates recognised perverse financial incentives as an important barrier for HHCs and recommended that the current situation of care being subsidised but innovations not as significantly impeding uptake of value-adding innovations. An example solution considered by Dutch delegates was pay-for-result payment, i.e. based on outcomes as opposed to pay-for-task payment, i.e. based on completed tasks. There is a common movement towards the former system of reimbursement across much of Europe. Delegates attending the UK workshop argued that perverse financial incentives will only disappear from the UK HHC landscape once the different funding streams and cycles are integrated, aligned, and given flexibility to produce long-term as opposed to annual returns.

Leading barriers identified by HHCs with as great or even greater frequency as the finance-related barriers include: insufficient infrastructure, e.g. wifi, to support adoption in Belgium – a barrier that no respondents from the Netherlands selected, however; and lack of encouragement and support from central policy-makers and regulators for HHCs in the Netherlands to experiment with, test and adopt innovations – relatively important in the UK and Belgium too but not mentioned by any HHC respondents from France.

Although Dutch needs finding workshop delegates identified lack of fit-for-purpose products (including those that overcome different protocols in order to provide universal communication capabilities, those that are designed with the elderly in mind, i.e. with limited digital skills or visual impairment, and hardware lacking robustness) and uncertain long-term return on investment as barriers for demand actors, these barriers were not rated highly by demand actors themselves during the survey.

Overall, the French HHCs seem to face the fewest number of barriers, with lack of external funding, internal budgets, lack of fit-for-purpose products on the market and low awareness of what innovations are available on the market being the only barriers identified by more than one French HHC. Lack of time to dedicate to searching for innovations was the reason cited by French workshop delegates responsible for their low awareness, creating opportunity for an easy-to-use directory of innovations for HHCs and other demand actors in France.

[Figure H8]



## (2) Local authorities

The relatively higher prevalence with which budget / funding and return on investment (ROI) were identified by smaller local authorities (those with responsibility for populations <200,000) as significant barriers to their adoption and support of innovations as compared to larger local authorities (those with responsibility for populations >200,000) suggests that financial matters are having a disproportionately higher detrimental impact on innovation processes in small local authorities. Smaller local authorities also seem to convey the message that they feel less capable to innovate as they reported having no dedicated budget, teams, processes and skills for innovation activities and lack of support from central policy-makers and regulators as more significant barriers than larger local authorities. Dutch needs finding workshop delegates recommended a role for central organisations to create and support an effective value chain for bringing innovations to market that includes activation of customer and end-user groups and guidance on what value there is potential to unlock at each step of the value chain (working longer and re-integration enabling versus institutional care). UK needs finding workshop delegates felt that lack of support from central policy-makers for innovations in the past suggests that such a concerted and positive show of support from central policy-makers for innovations, that will require the alignment of multiple currently fragmented processes, will take many years to come to fruition in the UK.

Smaller local authorities were more likely to suggest that user reluctance to adopt an innovation and uncertainties surrounding user satisfaction with the result are more likely to deter them from innovating than larger local authorities. There are many reasons why this might be, including that smaller local authorities have a closer relationship with their population than their larger counterparts, which heightens the risks inherent in innovations in their minds. However, it seems that larger local authorities are more likely to lack the specialist knowledge to identify and assess innovations than small local authorities. This may once again be a product of the fact that smaller local authorities have a better understanding of the needs, preferences and behaviours of their populations, including the innovations that are already being used amongst their populations. UK needs finding workshop delegates recommended that guidelines be produced to support local authorities and other demand actors to make robust assessments of the utility and outcomes potentially delivered by an innovation, through trial implementation or otherwise. They also suggested that local authorities create a platform that facilitates crowd-sourced assessments and reviews of innovations from the public and other demand actors.

[Figure L4]

## (3) Elderly and Informal carers

Cost is the most often cited reason for elderly people and informal carers to give for not purchasing and using innovations that could help to retain the independence and quality of life for both elderly people and their informal carers. Dutch needs finding workshop delegates explained that this situation is particularly acute in the Netherlands because until recently care services were free to the end-user; the recent expectation for end-users to pay limits their willingness to pay for associated products and services, including innovations. This is a mindset that Dutch workshop delegates felt must change, as enabling innovations can create very large savings from delayed or prevented institutionalization, i.e. their return on investment potential should be lauded.

Overall, however, informal carers reported many more barriers than elderly people, including concern about product robustness. UK workshop delegates suggested that interfaces other than smart mobile devices, e.g. standard TVs, landline phones and purpose-built hardware, are more

suitable for the very elderly, digitally excluded, and those with greatest fears for technology robustness.

It is interesting to note that elderly people in Belgium identified with the worry that innovations might replace human contact whereas no elderly people in the UK did. On the other hand, it would seem that elderly people in the UK feel less aware of what innovations are available than their Belgian counterparts. This is consistent with the fact that elderly people in the UK are currently using very few innovations [Figure E7].

Although stakeholders attending the Belgian and Dutch workshops seemed to believe that elderly people and informal carers would consider dubious credibility of products and services as a barrier to purchase, only one survey respondent selected this option. This suggests that there is overestimated need for industry standards for these types of products. In any case, workshop delegates suggested that standards such as “tested in living lab” or “tested in Accelerator” might be suitable, but that the final designation should be decided in consultation with investors.

[Figures E11 and E12]

#### **iv) Intermediary actor understanding of other stakeholder barriers**

##### **(1) Supply actors**

Our survey results indicate that British Intermediary Actors have the best understanding of Supply Actor barriers. For example, British Intermediary Actors were able to correctly identify the top two barriers faced by Supply Actors (public sector complexities impeding market growth and lack of budget or funding) in their exact order. Moreover, the concentration of UK supply actor-reported barriers on public-sector issues in general was detected by intermediaries with excellent precision.

Intermediaries from across the 2 Seas region appear to very sensitive to the fact that a major barrier facing supply actors in their countries is lack of budget or funding, as they all correctly identified this as a top barrier. Furthermore, all Supply Actors except for the British listed slow adoption of innovations by demand actors as one of their top three barriers, and this was correctly identified by French and Dutch intermediaries. Slow adoption was not reported by Belgian suppliers but regulations was, and this was correctly identified by Belgian intermediaries.

However, there were discrepancies between the remaining barriers reported by suppliers and those identified by intermediaries in France, Belgium and the Netherlands. For example, Belgians intermediaries believe that slow adoption of innovations by demand actors is a barrier for Supply actors, but Supply actors did not report this. Similarly, Dutch intermediaries seem to believe that supply actors deem there to be a lack of collaboration between the public and private sectors, but Dutch supply actors instead reported lack of consumer and institutional buyers as their top barriers.

##### **(2) Housing, health and care providers**

Intermediary actors from all 2 Seas countries correctly identified lack of internal budget and sources of external funding as a major barrier preventing or complicating housing, health, and care providers in their countries from adopting innovations. This demonstrates that it is common knowledge amongst intermediaries that money is the major barrier for these demand actors.

Consistent across every country was the observation that housing, health and care providers were more selective in the barriers that they identified, whereas intermediaries were more likely to identify a wide range of barriers. This suggests that intermediaries perceive these demand actors to

face more types of barriers than they actually do, or that they struggle to differentiate major and minor barriers.

### **(3) Local authorities**

Lack of internal budget and funding was correctly identified by intermediaries in the UK, France and Belgium as the leading barrier preventing or challenging adoption of innovations by local authorities in those countries. Dutch local intermediaries ranked it as second most important barrier for their local authorities even though it did not actually feature in the top 3 list of local authority-reported barriers. This suggests that Dutch intermediaries perceive the situation in the Netherlands to be consistent with the majority situation across Europe, even though this might not always be the case.

Both local authorities and intermediaries in Belgium and the Netherlands reported lack of dedicated budget, teams, processes and skills residing within local authorities as a leading barrier to adoption of innovations by local authorities. This was not the case for the UK where intermediaries identified it as a leading barrier but the local authorities themselves did not. There could be many reasons for this, including lower awareness or acknowledgement amongst UK local authorities of their limitations, or that it appears that way to an outside organisation such as intermediaries who are not aware of the intricacies of local authority challenges.

There is distinct difference in the importance that local authorities and intermediaries in the UK, the Netherlands and Belgium place on the significance of support from regulators and central policymakers for stimulating and supporting local authorities to adopt innovations: only French local authorities identified this as a major barrier whereas intermediaries from all four countries did. Again, there could be multiple explanations for this, including that the outside perspective of intermediaries affords them more objectivity to analyse the state system, or that intermediaries have to rely on the media and official reports to source intelligence, which may give them an unbalanced view of the reality of the situation for local authorities. Inability to access decision-makers was an issue raised by UK workshop delegates that it was felt is impeding the needs of the elderly being met; intermediaries might consider themselves a good representative of demand actors and the ideal conduit for central policy-makers.

### **(4) Elderly people and their informal carers**

Cost was correctly identified by intermediaries in both Belgium and the UK (the only two countries collecting data on this aspect) as a leading barrier preventing or complicating elderly people and their informal carers from adopting innovations, although Belgian intermediaries incorrectly placed fear of change as a more significant barrier (rather than as second most significant after cost).

Fear about change, infrastructural limitations, product robustness, and concern that products might replace human interaction were identified as possible barriers by Intermediary Actors from both countries. This reveals that from the Intermediary Actors' perspective, the barriers faced by elderly people and their informal carers is similar and irrespective of their country. However, infrastructural limitations was not reported as a major barrier to Belgian elderly people and their informal carers, and fears related to product robustness and human replacement was not reported as a major barrier by UK elderly people and their informal carers. This tells us that the actual barriers met by the elderly and their carers is more specific to their country than is currently understood by Intermediary Actors. Furthermore, this reveals that Intermediary Actors perceive there to be more barriers than there are in reality – similar to their perspective on housing, health, and care providers.

## d) Actions to overcome barriers

### i) Supply actors

French supply actors currently and plan to engage in a very limited number of activities to overcome their barriers than suppliers in the other 2 Seas region – none of them reported making applications for funding, providing demand actors with incentives to innovate, or forming private-private syndicates. French suppliers seem to prefer creating public-private partnerships when trying to overcome their barriers.

UK supply actors are most active in trying to overcome their barriers in general. Already 62% of them dedicate time to making applications for funding, and this is indicated to increase to almost 100% of these UK survey respondents in the future. The majority of them are also currently engaged in co-creation activities to improve market fit, but it seems that forming public-private partnerships, private-private syndicates, increasing product offering and exporting will gain greater popularity in the future. This perceived shift of energy away from co-creation and to other activities is echoed by Belgian and Dutch supply actors and may simply reflect the fact that companies mature from R&D (co-creation) to commercial (partnerships, export, etc) activities with time. Dutch supply actors are particularly likely to increase their export efforts in the future, which is consistent with the finding in the SEAS 2 Grow “[Market Study](#)” that the state places great importance on export in the Netherlands, and provides innovators with numerous resources to do so successfully.

It is interesting to note that Dutch needs finding workshop delegates emphasised the importance of enhancing products / product range (e.g. to appeal to the mainstream public rather than just the Silver Economy and to improve the social acceptance and attractiveness of products) as ways for supply actors to build more successful businesses, whereas the survey results indicate that few supply actors are actively using this as a strategy. Popularity for this strategy is higher in the future, although least so in the Netherlands.

[Figure S10]

### ii) Intermediary actors

Belgian Intermediary actors are currently most proactive in overcoming their barriers using a wide range of strategies, leaving them limited opportunity to try out new strategies in the future. French intermediaries are currently most selective in the strategies that they employ to try to overcome their barriers, with most relying on forming international partnerships and partnerships with public organisations only. It would seem that they plan to address this by broadening their toolboxes of strategies in the future; making applications for funding and gaining even more partnerships with public organisations is high on their agenda for the future. This focus on partnerships with public organisations in France is all the more intriguing given that only one survey respondent from France is partnering with private organisations in order to overcome its barriers, and no new French intermediaries are interested to try this strategy in the future. This is quite different to in the UK and the Netherlands where partnerships with private organisations seem to be as highly valued by intermediaries as partnerships with public organisations. This suggests that intermediaries in France are more strongly supported by the state than elsewhere in the 2 Seas region.

[Figure I7]

### iii) Demand actors

## (1) Housing, health and care providers

The strategies most frequently already employed by HHCs across the 2 Seas region to overcome their barriers to adoption of innovations are 1. To apply for funding, 2. To invest in internal infrastructure so that they can support, for example, wifi-enabled innovations, and 3. To lobby local authorities, policy-makers and other influential entities, e.g. for greater freedoms to experiment or to receive more state support. Few new HHCs plan to apply for funding or to invest in internal infrastructure in the future, whereas many more are keen to begin lobbying. Other strategies that are likely to grow in popularity in the future are collaborations with supply actors, e.g. co-creation to ensure product fit, and testing out innovations for a trial period to be able to assess effectiveness. This shift indicates that HHCs are willing to try more pragmatic, “hands on” strategies in the future.

HHCs in the UK are most active in trying to overcome their barriers today. It is because of the very high number of UK HHC survey respondents already making applications for funding and lobbying that these are two of the leading strategies for the whole 2 Seas region; the levels with which HHCs in the Netherlands and Belgium are conducting these strategies are actually relatively modest but nearly 100% in the UK. The only other country in which a single strategy is being acted upon by HHCs in high numbers is in Belgium, where, like in the UK, more than 50% of HHCs are already investing in internal infrastructure.

In contrast, HHCs in Belgium seem to be the least active in trying to overcome their barriers today. There are multiple possible explanations for this, including that these barriers are not as problematic to HHCs in Belgium as they are in the other countries (and particularly in the UK), for example because it is less critical to their sustainability or reputations, or that external organisations, e.g. local authorities, proactively share the burden of trying to overcome these barriers.

In addition to being the most active in trying to overcome barriers today, HHCs in the UK also seem the most keen to experiment with new strategies in the future, particularly in those strategies that they have not implemented before. The upshot of this is that all strategies seem to be of high interest to HHCs in the UK, whereas the other three countries are likely to remain more selective in the strategies they implement. For example, no HHCs from Belgium or France, and only one from the Netherlands, is planning to upskill its staff e.g. with digital skills, in order to overcome its barriers. One possible explanation for this might be that entry-level staff training in these countries is higher than in the UK, negating the need for upskilling later on, but significant focus in the French needs finding workshop on the need for health professionals in France to receive specialised training in digital technology undermines this hypothesis. Workshop delegates suggested the best way to achieve this training would be to add digital skills to the national education program for health and care workers.

It is perhaps unsurprising that few HHCs across the 2 Seas region are already consulting an expert in innovations as a strategy to overcome their barriers, given that financial pressures are reported by HHCs across these four countries (see SEAS 2 Grow “[Market Study](#)” for more information).

[Figure H10]

## (2) Local authorities

Larger local authorities appear to have tried a wider range and greater number of strategies to overcome their barriers to adopting or supporting innovation than smaller local authorities. This is unsurprising as organisations with more employees have the capacity to undertake multiple activities whereas smaller organisations have to focus their resources in fewer opportunities.

Overall across the four 2 Seas countries, there is relatively low variation in the strategies that they are now and plan in the future to use to overcome their barriers. Overall, local authorities in each country uses a multitude of strategies.

The strategies that are currently most popular are provider collaborations, i.e. supporting HHCs in innovative projects, and population support, e.g. public awareness raising and training. The strategy expected to see most growth in the future by local authorities is making applications for funding and exploring shared risk and reward arrangements, e.g. for local authorities to have a stake in innovation projects in order to catalyse or enable the project in the first place, with the local authority retaining benefit in the case where the innovation leads to positive outcomes, e.g. revenue generation or costs reduction. Innovative financing arrangements was a need independently identified by Belgian needs finding workshop delegates too, but UK workshop delegates questioned whether local authorities in the UK would engage in such an arrangement, as they believe that they have a track-record of risk aversion.

[Figure L5]

### (3) Elderly and Informal carers

Elderly people and their informal carers in Belgium and the UK seem to take different approaches to try to overcome the barriers they face in adopting innovations. Although it might be symptomatic of the fact that the majority of Belgian elderly people and informal carers who completed the survey were recruited from a living lab panel database, the survey results indicate high engagement of these stakeholders in product co-development and testing activities. Elderly people and informal carers in the UK seem much less involved in these activities today, but they expressed interest to become more involved in the future – something that UK workshop delegates believed would be the case. This is good news for supply actors, especially as French needs finding workshop delegates recommended that supply actors spend more time and energy validating needs for a potential solution with end-users before investing considerable resources in R&D.

A consistent result across the two stakeholder types and two countries was that everyone is keen to try a product out before they buy it. This result promotes retailers to offer free or discounted trial periods on the products they are selling, and the opportunity for potential customers to try out alternative products in demonstration houses such as the Smart Homes in Eindhoven, Netherlands <http://www.smart-homes.nl/default.aspx?lang=en-US>. Delegates attending the Belgian needs finding workshop suggested “care libraries” as a good vehicle to enable citizens to “get in contact with” products. They lauded the ‘Huis van morgen’ in Roosendaal, The Netherlands as being effective.

A striking difference between the UK and Belgian situations is that in the UK, it is the informal carers who are more likely to go online searching for advice and to invest time and energy in increasing their skills to be able to use innovations, e.g. computer skills. In Belgium the situation appears to be the reverse, suggesting that elderly people in Belgium are less intimidated by technology than their UK counterparts.

[Figures E13 and E14]

## e) Evaluation of the impact of innovations

### i) Demand actors

## (1) Housing, health and care providers

Only one HHC (from the Netherlands) did not identify improvements to the quality of life of elderly clients / residents / patients as an outcome that they would expect from an innovation. Similarly, improvement in user (elderly person, friends or family, or health/care staff) satisfaction was identified as an important outcome by all but one HHC in Belgium and one in the Netherlands. This overwhelming response confirms the expectation that HHCs are primarily driven by the needs of their service users, as they should be.

The next most frequently evaluation metric cited by HHCs across the 2 Seas region was increased efficiency, suggesting that making optimal use of staff and consumables is important to HHCs. It is interesting to observe that the potential knock-on effects of increased efficiency, namely increased productivity, reduced costs and increased profits were identified less frequently, even though finance-related barriers were the barriers to adoption of innovations most often selected by these stakeholders [Figure H9]. There are a number of possible explanations for this, including that HHCs have reservations about admitting or acknowledging financial motivations, or that the potential of innovations to bring cost-saving and revenue-raising benefits is not fully appreciated by HHCs. That being said, in the Belgian needs finding workshop, the leading benefit that could be enabled by an innovation sharing digital platform accessed by all HHCs and local authorities was reduced costs, followed by service quality improvement.

It is perhaps unsurprising that increased productivity is a leading evaluation metric in the UK, given that it is in the UK that HHCs are most likely to be for-profit organisations [Table H1]. The ability an innovation to improve productivity does not appear to be a motivating reason for adoption of innovations by HHCs in Belgium and the Netherlands. Interestingly, in France it is increased profits (which are a function of revenue generation and cost savings) that HHCs are more interested for innovations to demonstrate, even though few HHCs in France are for-profit. The ability of innovations to increase profits does not seem to be a priority requirement for HHCs in Belgium.

A final interesting remark can be made from the fact that it would appear that staff are most valued by French HHC employers, as 100% of HHCs in France deem efficiency as an important evaluation metric, and staff satisfaction was identified by all but one HHC responding from that country.

[Figure H11]

## (2) Local authorities

The metrics by which local authorities evaluate the effectiveness of innovations varies between local authorities responsible for small and large populations: there is a tendency for smaller local authorities to be more persuaded by outcomes related to their population, e.g. end user satisfaction and elderly quality of life. These outcomes are of course important to large local authorities too, but not to the same extent, which is consistent with earlier results suggesting that smaller local authorities have a closer relationship with their population, which in turn affords them greater understanding of their needs, preferences and current behaviours.

Even though finance-related barriers were reported with higher frequency by small local authorities than large local authorities [Figure L4], the impact of an innovation on local authority finances was more important to large local authorities than small local authorities. One possible reason for this discrepancy might be that larger local authorities feel greater political pressure to reduce costs, whereas smaller local authorities actually feel the squeeze more acutely.

It is also interesting to notice that smaller local authorities have little if any interest in Supply actor profits, whereas larger local authorities are concerned with this. This is logical given that most larger government organisations have responsibility and motivations for regional development and growth, which smaller organisations most likely do not. On the other hand, the benefits of innovations to HHCs was deemed more important to local authorities of all sizes than benefits to supply actors. This is likely to be because of the stronger affiliation of two public organisations in addition to potential shared responsibility in the event that a HHC suffers demise.

[Figure L6]

### (3) Elderly and Informal carers

A leading reason for an elderly person or an informal carer to consider adopting an innovation is to improve their quality of life. There are differences in how much these two stakeholder groups value other metrics of success: elderly people are most persuaded by the opportunity to retain their independence and increase the number of activities that they can take part in, which is also important to informal carers, but not to the same extent. On the other hand, the potential for an innovation to reduce the costs of care is very compelling for informal carers, which is consistent with the earlier result that informal carers are frequently driven to the conclusion that an innovative solution is needed to reduce costs [Figure E10].

[Figures E15 and E16]

## 8) Conclusions

This report has identified many important differences between Silver Economy stakeholders both within and between the 2 Seas countries of Belgium, France, the Netherlands and the UK. It is therefore recommended that anyone wishing to support, work with or sell to a Silver Economy stakeholder conducts thorough research to ensure that they understand the drivers, pressures and experiences intrinsic to that stakeholder. Pitching benefits that are not relevant or a priority for an individual stakeholder is unlikely to result in a successful outcome for anybody. For example, our survey has indicated some interesting differences between the types of innovations that are important to elderly people and informal carers, including some inversely proportional levels of interest in innovations related to mental health and informal communications (including social media). Suppliers should use this intelligence to identify their target market, product specification, and marketing approach; HHCs and local authorities to understand where potential tensions between customer / end-users may arise so that mitigation can be put in place; and intermediaries to translate this context between supply and demand actors, to ensure that solutions meeting articulated needs and that are socially acceptable emerge from our companies as efficiently as possible.

The systemic differences between the 2 Seas countries adds a second dimension of variation into the mix. Our survey results demonstrate that these differences can have quite pronounced consequences for stakeholders, although these differences seem to be smallest for local authorities; the survey responses from local authorities across the 2 Seas region were perhaps the least different.

One important systemic difference between the countries seems to be the different levels of integration of their housing, health and care services. This has obvious implications for innovations that rely on or facilitate this integration, both in terms of the value that the innovation can add, and



the practical possibility for its technical and social implementation. The opportunity for innovations that support data sharing is a case in point. Both the survey and needs finding workshops identified competition

Another systemic difference to consider is the availability of state-funded versus private purchase services in each country. With reductions in public budgets being a common theme across Europe, the level of state support in some 2 Seas countries is somewhat in flux. This obviously complicates the identification of the optimal business model and target customer group, which in turn have consequences for product specifications. Intermediaries across the region appear to have the knowledge and skills to help supply actors understand and navigate the complicated political and state service landscapes in each country.

Perhaps reflecting cultural differences rather than systemic differences is the observation that French stakeholders are generally more selective or focussed in their approaches: French supply actors seem to specialise in a limited number of innovation types only; French intermediaries seem to offer fewer support services each; all French stakeholders perceive there to be only a handful of barriers relevant to them; and most French stakeholders focus their resources in only a few strategies to overcome their barriers. On the opposite side of the spectrum is the broad and diverse approach taken by UK stakeholders, the exception being the elderly and informal carers in the UK who seem somewhat deactivated from the Silver Economy compared to their European counterparts. It is interesting to note that although French intermediaries each provide a relatively small number of support services, between them they still provide all the services that might be required. This suggests that the more specialised approach by French intermediaries at least is centrally orchestrated to benefit from concentration of resources where expertise exists. Smart specialisation was a strategy identified in the Belgian needs finding workshop as something that could be beneficial in Belgium as well.

The leading barriers to supply, support, use and purchase of Silver Economy innovations repeatedly identified by all stakeholder types and across 2 Seas country are all finance related. It would therefore appear that perhaps what is required more than innovative products and services is innovative financing arrangements. Many HHCs seem to feel that local authorities should be more proactive in this regard, for example by agreeing to share the risk and reward of adoption of innovations by HHCs. Local authorities have indicated that they are willing to take on this challenge, as well as shared risk and reward arrangements with supply actors, but anecdotal evidence suggests that this may be an aspiration rather than something they can do in practice. Perhaps a more immediately achievable solution is for local authorities and central governments to promote outcome-based commissioning of both innovative products and HHC services. This has the potential to incentivise uptake of the most effective solutions, but burden remains on supply actors to collect evidence of potential for outcomes to be delivered by their innovations, and on demand actors to finance the upfront costs of innovations. Leasing rather than straight purchase, and even payment to supply actors based on the ability of their innovation to deliver outcomes for them are potential workarounds. Crowdfunding, social investment and impact bonds were other innovative financing arrangements that Belgian and UK workshop delegates identified as having potential fund-raising abilities for all supply and demand actors.

Another area where innovation seems to be required is in methods of awareness raising and access to innovative products and services. Workshops occurring in all four countries independently identified a need for a match-making platform that supports supply actors to promote their innovative products and services, perhaps objectively assessed and reviewed by trusted organisations such as local authorities or even through crowd-sourcing, and that allows demand

actors to search this directory of innovative products and services for the solutions that would best meet their needs. The idea for this platform to be international in reach would support transfer of best practices, advice and innovative products across borders.

Consistent with the low level of adoption of innovations by UK elderly people, UK workshop delegates in particular focussed on the need for more socially oriented innovations in order to increase awareness and access to innovative products. Mass media attention, activation of the younger generations (including grandchildren), information promotion at public places such as community groups and libraries, availability of peer “Silver Economy champions” who can provide objective advice on product selection, financing and implementation were all ideas suggested.

Tension seemed to arise between workshop delegates across the regions as to whether product launches would be more successful if they focussed on the elderly as the target customer or end-user, or if they appealed to a multigenerational audience, as it was argued by some that the needs of the elderly are the same as the needs of people of all ages, to some extent. The example of the iPhone was given in the Netherlands: the iPhone brings tremendous benefits to millions of elderly people across the world and yet it might not have been nearly as successful if it had only been developed for the elderly. Really revolutionary concepts are an improvement for everybody.

Finally, a common theme highlighted in workshop sessions and perhaps not adequately explored in the survey was the role that housing, residential developments and community resilience has to play in strengthening the Silver Economy. Dutch workshop delegates argued that all future construction should be permeated with innovation and construction standards adapted for innovation. They identified the need for incentives to encourage developers to take a longer term and more social approach to their future building projects; the current system seems to incentivise the mass building of homes and communities that are not “life course stable”, but initially very lucrative. The ideal home and community was identified as encouraging the building of intergenerational social structures and able to support the (retro)fitting of solutions that enable a person to age safely, happily and independently in their own home, e.g. homes with the connectivity to support IoT.

## 9) Supplementary material: plots of all results by stakeholder type

The reader is advised to open the following documents (in annex) to view the plotted results by stakeholder type:

- “Annex - Supply Actor plots.pdf”
- “Annex – Intermediary Actor plots.pdf”
- “Annex – Housing health care provider plots.pdf”
- “Annex – Local authority plots.pdf”
- “Annex – Elderly and carer plots.pdf”