A cluster initiative

BIZ4AGE

Business Opportunities for Healthy Ageing
FOREWORD

INTRODUCTION

CHAPTER 1: Background to the problem
What is healthy ageing?
Overarching theme

CHAPTER 2: The context of the cluster
Overview of the projects brought together in the cluster
Insights from the cluster

CHAPTER 3: Business opportunities and challenges in healthy ageing
Opportunities from societal challenges
Opportunities in terms of products and services across the 2 Seas area

CHAPTER 4: Challenges and issues for SMEs seeking to innovate and cross boundaries
Barriers to cross border trade
Barriers to entering the healthcare market

CHAPTER 5: Cases from the cluster: Boundary crossing strategies

CHAPTER 6: Cases from the cluster: Implementing smart specialisation

CHAPTER 7: Gaps in our knowledge

CHAPTER 8: Summary and Conclusion
Biz4Age has worked to address one of the key research and innovation issues facing our generation: how to enhance economic development, while improving the quality of life of older people. Focusing on the Two Seas region, the cluster raises awareness of the emerging business opportunities created by the demands of healthy ageing amongst relevant stakeholders and also to raise awareness of the benefits of Triple and Quadruple Helix collaboration. It identifies new opportunities for trade and innovation in healthy ageing in the 2 Seas area and explores the ways in which business support for SMEs could be enhanced.

The cluster has identified the critical importance of boundary-crossing between organisations, markets and regions and network building to SME innovation in the context of healthy ageing. Networks are central to the Directorates thinking in terms of promoting innovation. As the publication maintains, to genuinely bring innovation to healthy ageing it is essential to find ways to connect firms, health and social care providers, local authorities, service users and knowledge institutes in order to create and share new knowledge and break down the barriers to innovation. The cluster also identified a range of activities and platforms through which SMEs could be supported in crossing boundaries. These support mechanisms range from simple match-making introductions for firms that are well-established to more sophisticated support through incubators, competitions and innovation labs that will help firms orientate both their technologies and their business models towards the needs of health and social services providers and indeed, end users themselves and to connect with potential customers and partners. This mixed ecology and promotion of connectivity is central to our own thinking.

In our view, successful industries are successful because they create interdependencies and knowledge sharing around particular technologies at a regional level – what has now been termed ‘smart specialisation’. Success brings success as firms and other knowledge actors become attracted to the region. Knowledge and support agencies have a crucial role in creating the knowledge, expertise and interconnectivity essential to build successful smart specialisation. The same logic applies, this cluster suggests, to creating innovative solutions to social challenges like healthy ageing. The most innovative solutions will emerge in the regions that are able to make innovation part of their embedded regional competencies and this means creating a rich and varied public and private context that supports, stimulates and directs innovation.

Ben de Reu
Healthy ageing is one of the great challenges of this century. To continue to grow economically Europe must find ways to support and encourage better health amongst the aged and reduce the cost of maintaining older populations. Technology provides one answer but drawing on the lessons of the past, it is imperative that these answers come ‘bottom up’ from entrepreneurs, who are close to the problems faced by ageing populations (OECD, 2014) and by drawing on good practice around Europe – what we have termed ‘crossing boundaries’.

It is essential, in our view, that entrepreneurs connect with health care providers, social services, policy makers and users in the wider 2 Seas area in order to share ideas and drive innovative solutions. To achieve this, the barriers to dialogue, innovation and entrepreneurial activity need to be addressed so that these barriers can be crossed and bridges built, not only to link different spheres of activity and different communities but also to cross regional and national boundaries.

This report seeks to address these issues both by capitalising on the joint outputs of two major projects, CURA-B and 2 Seas Trade and by sign-posting what more needs to be done. This work is inspired by notions of open innovation in healthcare, regional systems of innovation and emerging themes of regional smart specialisation.
What is healthy ageing?

According to the Euro HealthNet on Healthy Ageing: ‘Healthy ageing means optimizing opportunities for physical, social and mental health to enable older people to take an active part in society without discrimination and to enjoy an independent and good quality of life. It means taking a holistic approach, taking into consideration the many different aspects of life which play a role.’ (Euro HealthNet, 2013). Euro HealthNet has identified 8 steps to healthy ageing: diet and nutrition; social inclusion and participation; physical activity; education and life-long learning; environment and accessibility; access to services; new technologies and employment and volunteering.

Our own cluster research has identified sectors where technologies can make a particularly strong impact in the 2 Seas region; these are food, building and tourism.

The goal of the European Innovation Partnership (EIP) on Active and Healthy Ageing (AHA) is to pursue a ‘triple win’ for Europe by:

1. Enabling EU citizens to lead healthy, active and independent lives while ageing;

2. Improving the sustainability and efficiency of social and health care systems;

3. Boosting and improving the competitiveness of the markets for innovative products and services, responding to the ageing challenge at both EU and global level, thus creating new opportunities for businesses.

This cluster seeks to address these challenges by exploring the mechanisms by which government, businesses, knowledge institutes and citizens can work more effectively together.

---

A common theme to examine in both projects emerged during the cluster process, that both innovation and international trade can be seen as being forms of ‘boundary crossing’. Innovation, both in technology and services is key to addressing the emerging demands of healthy ageing. Fundamental to responsible and effective innovation is the motivation, opportunity and determination of entrepreneurs to cross borders and boundaries in search of new opportunities, better understanding of users and new partnerships. Innovation, in this framing, may involve taking dementia-friendly foodstuffs, common to one region, to similar markets in another region or to new customers within the same region, for example, to care-homes as opposed to individual consumers.

It may also involve taking a technology familiar to one context, for example a GPS system used for outdoor leisure, and adapting it to another context, for example, to support carers of dementia sufferers. Moreover, rather than seeing entrepreneurs as ‘driving’ innovation, we chose to see innovation as something that happens when the ‘entrepreneurially minded’ cross boundaries to learn from new contexts and to contribute to them – either through bringing new products to new markets or through co-innovation. With the crossing of boundaries comes new and often unanticipated learning. Crossing boundaries is good for product and service development but it is also good for the companies, individuals and organisations involved. Realising the opportunities for growth, learning and even organisational rejuvenation are just a few of the benefits to business. Our approach has been to capitalise on the insights that our existing research can, in combination, shed on these issues with a specific regard to healthy ageing.

Central to the idea of crossing boundaries is the idea of open innovation. Developing solutions to healthy ageing is challenging because it often requires building bridges between systems and communities that are dissimilar, even incompatible. How we encourage bridge building between such communities is a critical lesson to learn and be learned. The cautious, rule-bound culture of medical bureaucracies are a poor fit with the urgent need of entrepreneurs and small firms to ‘make sales’ in order to survive. In France it can take two years to have a medical device approved – this is simply too long for a small firm to fund a relationship. Understanding the roles of the four elements of the Quadruple Helix: Government as the facilitator, the Knowledge centre role in pure and applied research and as neutral facilitator and meeting space for other parties, the role of SMEs to take advantage of this research and citizen involvement in design is as critical as the identification of how, in practice, they can and will work together.

In terms of crossing borders, it became clear through discussion that what the 2 Seas Trade project had learned about the support mechanisms needed to help firms cross borders into new regions, could apply equally to firms trying to cross organisational and market boundaries or at the very least could at least inspire innovative thinking in policy. The work of this cluster has been to highlight this movement across boundaries, be they international, organisational or market boundaries.
The contribution of the Biz4Age cluster has been to identify the means by which entrepreneurs can be encouraged to seek opportunities in new contexts (national, market and organisational) and to overcome the barriers that stand in their way - in particular the barriers to innovation. This chapter provides a background to the projects involved in the cluster, CURA-B and 2 Seas Trade and outlines the emerging themes that came out of the cluster activities.

(http://www.2seastrade.eu/events/event/Innovation-for-independent-living-and-the-ageing-population)
Overview of the projects brought together in the cluster

2 Seas Trade

2 Seas Trade was a three and a half year project, part-funded by the INTERREG IV A 2 Mers Seas Zeel programme which aimed to encourage SMEs to do business in another partner region through providing practical support to companies from England, France, Belgium and the Netherlands. Many SMEs find that the crossing of borders is a challenging prospect. There are various barriers (both perceived and real) and there are a range of additional requirements when trading internationally as opposed to in familiar markets and contexts. The nine partner organisations involved in the 2 Seas Trade project worked together to provide a range of market entry support services to help companies do business in Kent, East and West Flanders and the South West of the Netherlands as well as in the Nord-Pas de Calais, France. The project responded to the needs of SMEs in the partner regions ‘early-stage’ support with regards to exporting.

2 Seas Trade also ran a specific event in Kent in October (2013) on the health and social care supply sector to bring together businesses from England and the Netherlands to explore the demographic, health and social care challenges in the partner regions and to meet each other with a view to developing collaborative business activities. The project found that SMEs could benefit from taking steps which included being proactive in seeking advice and information, performing research, looking for contacts and physically taking products and services to the target markets.

Deliverables from the 2 Seas Trade project included:
- 39 business workshops in which over 500 businesses participated;
- creating a joint stand space for SMEs at 5 international trade fairs at which 44 companies exhibited products;
- 15 sector-focused market visits involving more than 300 companies;
- 199 one-to-one support and advice meetings with SMEs and 4 ‘Doing Business’ Guides produced in 3 languages.
2 Seas Trade also produced an online guide to getting started in international trade and created a trade assessment tool (http://www.2seastrade.eu/images/uploads/Kent_Export_Guide.pdf).

Steps for Successful crossing of borders

Seek Advice and Information
- Attend seminars and workshops on topics including “Doing Business in...”
- Use a range of online resources including the 2 Seas Trade ‘Trade Assessment Tool’ which can help companies plan their export strategies
- Book 1-2-1 advice meetings with an international trade advisor

Carry out Research and Make Contacts
- Make use of country specific guides and information such as the 2 Seas Trade Doing Business Guides
- Join market visits to the target country
- Visit a trade fair to assess trends, become familiar with the competition and to make initial contacts

Physically Take Products or Services to Market
- Book space at an international trade fair in a target region or country which is relevant to the business sector in question

2 Seas Trade helped a large number of SMEs to make progress on their export journeys and helped the partners to understand that providing the right support to SMEs in the right way and at the right time is beneficial in helping them to internationalise, innovate and stimulate business growth:
CURA-B (acCURate-Business) was a three year EU ERDF part-funded project through the INTERREG IV A 2 Seas programme to promote entrepreneurship, innovation and the development of new cross-border initiatives for the development and deployment of innovative AT-led (Assistive Technology) service solutions for the social and health care markets. The project brought together organisations from Zeeland in the Netherlands, from the West Flanders region (Belgium), from the Nord Pas de Calais region (France) and from the East of England region (Suffolk and Cambridgeshire). The objective for all the regions participating was to improve efficiency in their healthcare sectors by improving access for SMEs wishing to contribute innovative Assistive Technology products and services and to better meet patient/user needs and lower the cost of meeting those needs.

CURA-B produced an understanding of the perspectives and needs of public sector providers and the obstacles facing SMEs to entering the AT/Healthy ageing market, generated ideas for possible actions and in nine pilot projects brought together the public sector, knowledge centres and SMEs to establish regional networks, trials of new technologies and services and introduce practical models of ‘Open Innovation’. Historically, few of the many innovative products and services that have been developed in the regions have reached the markets for health and social care. A new approach was necessary in order to help all stakeholders win in the business value chain, from the SME inventor to end-user. These new approaches were designed to bridge the gap between SME producers and end users through helping SMEs to improve access to the market through new business models, communicative interactions and win-win implementation strategies. The conclusions ultimately pointed to the need to build robust integrated ecosystems of public and private organisations.

**CURA-B delivering:** Empirical data on key challenges facing SMEs regarding market entry for AT products in the 2 Seas area; an online survey completed by 177 SMEs; 48 interviews of SMEs and 54 interviews of care providers; 17 stakeholder workshops across the 4 regions with 141 stakeholder participants. The project also undertook 9 activities and pilot projects including: On ‘Network creation’ (East of England and Zeeland); on ‘New Business Models’ (West Flanders and Nord Pas de Calais); on ‘Triple Helix Co-Creation’ (West Flanders, Zeeland and East of England). The project also created the CURA-B Best Practice ‘Business Manual’ for SMEs in 3 languages.
Emerging insights

As part of the cluster process, the Biz4Age partners reviewed and met to discuss the challenges and opportunities characterising their regions with respect to healthy ageing. The critical question for the Cluster was how SMEs could best take advantage of the opportunities identified and how the work done in the clusters might support this. A further key issue, emerging early in the Cluster was that of Smart Specialisation Strategy (SSS) - a technology and innovation framework for regional economies that builds on public policies, framework conditions, R&D and innovation investment policies. Key to this concern is how it is possible to enhance and shape the economic, scientific and technological specialisation of a region and consequently its productivity, competitiveness and economic success.

For West Flanders, a critical pillar of their Smart Specialisation Strategy is the 'Care Economy' itself for which there are two focus areas: rethinking and renewing the Infrastructure and the Services that support the care economy. For Kent there are emerging sector strengths in renewable energy and low carbon technology, life sciences, food production and creative industries. Zeeland is a hotspot for High Tech, Chemicals, Agro & Food, Logistics and Life Sciences & Healthcare.

In our regions there are matches between the regional assets and strengths (geographical, business sectoral and knowledge centre based) and the demographic and social challenges they face in terms of ageing populations - particularly in their coastal areas. The Partners identified three shared sectors where there was a combination of local/regional strengths with potential impacts on healthy ageing: the construction sector, the food sector and the tourism sector. In order to emphasise the possibilities for innovation and cross-boundary learning for healthy ageing, the cluster renamed these sectors as: ‘Build and Care’, ‘Food and Care’ and ‘Tourism and Care’. It was decided, at an early stage in the cluster, to use these areas as a focus for the cluster conference as a means to explore further the opportunities, challenges and barriers to innovation constituted by these sectors with respect to healthy ageing.

The cluster work into Build and Care explored the different models that are needed to deliver new housing solutions, how lifestyles and expectations are changing for the elderly population and how this is producing new types of demand. The cluster identified opportunities in terms of the different types of accommodation that are and will be needed, services-driven business models and the need for innovation in personal finance for accommodation needs.

Food and Care explored how malnutrition is an emerging issue for the elderly that are hospitalised or at home in need of care. Mechanisms are needed to stimulate healthy food products and make them cheaper. SMEs need to respond to these changing needs - more choice and flexibility in food and care, than is presently available, is needed.

Tourism and Care found that for SMEs there are opportunities in ‘service encounters’ that are characteristic of the coastal areas and that create relationships and contacts that will help people age more healthily. There are 4 million single person households in the Netherlands alone and a large proportion of these are elderly (in a population of about 17m). There are also infrastructure design implications for designing tourism for healthy ageing.

One of the outcomes of the cluster process was to point to the need to experiment with better ways of linking different types of territory (organisational, geographical, age-defined) and different types of agent - entrepreneurs, users, consumers, policy makers and knowledge centres. Knowledge of what is required, what is available and what trajectories of development and innovation make sense needs to be generated. It was observed, for instance, that there is a huge variety of needs and demand amongst the older population and that they cannot be dealt with as though they are a homogenous group. The regions and the pillars of the Quadruple Helix are responding but there is a need for further clarification of their roles and identification of best practices in how to work together. Some ideas for this can be seen in the exemplar cases that follow in this publication.
Europe in the twenty-first century is experiencing profound demographic change. Consistently low birth rates and higher life expectancy will transform the shape of the EU-28’s age pyramid. Probably the most important change will be the marked transition towards a much older population profile and this development is already becoming apparent in several EU Member States.

Opportunities from Societal Challenges

The share of older persons in the total population will, in turn, lead to an increased burden on those of working age to provide for the social expenditure required by the ageing population. The relative importance of the very old is growing at a faster pace than any other age segment of the EU’s population. The share of those aged 80 years or above in the EU-28’s population is projected to more than double between 2013 and 2080. (source: Eurostat Europop 2013)

"The typical health care sector will not be able to answer - and it is not needed. We need to integrate societal questions, welfare and maybe economic questions towards the demands of elderly people. We need to think about the needs of the elderly but not only about the problems of the elderly. There are many opportunities, for business for instance".

Mark Leys,
Health Care Sociologist, Coordinator Research Group OPIH,
Vrije Universiteit Brussels
In the Nord Pas de Calais region, 19% of the population in 2010 is over 60. In France as a whole, 29% of the population is projected to be over 60 years of age by 2030 and 31% by 2050. Meeting the forecasted needs of ageing baby boomers without building excessive capacity and ensuring equity of access is a growing challenge.

Life expectancy at birth in France is increasing steadily, by three months per year for men and by two months per year for women. There is a growth in long term conditions. The main causes of death in France are cancer (29% of deaths), cardiovascular diseases (28.8%), accidents (7.4%) and diseases of the respiratory system (6.4%). Demographic projections show a 1% growth per year until 2040 in the number of frail people with neurodegenerative diseases (such as Alzheimer’s and Parkinson’s diseases) or with functional loss of autonomy.

In the UK, more than 28% of the population will be over 60 by 2030 and this figure rises to nearly 31% in 2050. In England it is projected that 22.2% of people will be aged 65 years and over by 2031 and more people will be living longer with longer-term conditions such as diabetes and dementia. Financial pressure means local authorities and health commissioners will be looking for more cost effective ways of providing services, integrating current provision and a wider range of providers to gain better efficiency/value for money.

In the Netherlands almost 32% of the population will be over 60 in 2030 and almost 33% by 2050. The increasing life expectancy in the Netherlands has not only led to a growing number of people aged 60 or over, but also to an increasing number of people suffering from one or more chronic diseases like diabetes, COPD, depression and dementia.

Statistics produced by POM West Flanders for the Biz 4 Age conference show that while the total population in the 2 Seas Region grows by 3.4% in the next 15 years, the population of people aged 65 or older will most likely increase by 34.4%. In 2030 the percentage of people over 65 in the total population will be 23% in the 2 Seas Region while in 2014 this percentage is 17.7%. This means by 2030 one in four inhabitants of the 2 Seas Region will be 65 or older, while nowadays this is only one inhabitant in six. In 2030, inhabitants who are 80 or older will represent 7.2% of the total population in the 2 Seas Region (today 5 in 100 inhabitants are over 80).

### Percentage of population aged 60 plus

<table>
<thead>
<tr>
<th>Country</th>
<th>2014</th>
<th>2030</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>24.3</td>
<td>30.0</td>
<td>31.8</td>
</tr>
<tr>
<td>Netherlands</td>
<td>23.8</td>
<td>31.7</td>
<td>32.9</td>
</tr>
<tr>
<td>UK</td>
<td>23.3</td>
<td>28.2</td>
<td>30.7</td>
</tr>
<tr>
<td>France</td>
<td>24.5</td>
<td>29.2</td>
<td>31.0</td>
</tr>
</tbody>
</table>

(Source: Report on global ageing and life expectancy, 2014)
New technologies have an important part to play in healthy ageing. There is a growing market for Assistive Technology products and services in the area of care (both for the elderly and those with chronic diseases). There also exists an opportunity to implement new services and products in order to make healthcare more personalised and efficient. Across the 2 Seas region there is a need for health-social care providers and businesses to offer product solutions to care providers that can improve the independence, lifestyle and care provision for both patient and carer. Our research also suggests there is a general shift towards extra-muralisation, towards a more demand-based offering of care-services and this will put stress upon services as they are designed now. Most providers are aware of the need for change and implementation of service-driven offerings. Social media and e-health for example, already allow online scheduling and online appointments and treatments, Domotics and screen-to-screen services. There are further opportunities in non-medical services with smaller providers trying to innovate by strengthening the personal touch in healthcare (with IT playing a less prominent role).

The needs of the ageing cannot simply be responded to by focusing on the generalised presumed effects of ageing (loss of balance, muscle weakness, forgetfulness). At the Biz4Age conference John Niland, CEO of Provide UK, pointed out that the healthcare and other needs of this group vary hugely; they cannot all be treated in the same way. The standardizing approach - one size fits all - also impedes innovation. It will take time for providers to fully grasp the varied and nuanced needs of the ‘grey market’.

Opportunities in terms of products and services across the 2 Seas area
SMEs seeking to innovate and cross boundaries face many issues: intrinsically limited scale, limited resource and finance and limited time resource and knowhow. In healthcare there are additional barriers to entering conservative and tender-driven markets.

Barriers to cross border trade

According to research carried out in Kent in 2010, smaller companies face a number of challenges when thinking about international trade for the first time or when deciding to pursue export markets including:

- A lack of managerial time, knowledge and skills about export markets
- A lack of financial resources to invest in adapting the business
- A lack of knowledge of foreign markets
- An inability to contact potential overseas customers

Barriers faced by SMEs gaining access to health and social care contracts:

1. **Scale:** Tender opportunities issued by Public Health and Social Care Commissioners tend to be large in scale. SMEs may not have the resources to work at a scale that would be large enough to meet the tender requirements. Increasing resources in the short term, for a tender process that has no guarantees of being awarded a contract, can involve high-risk short term borrowing.

2. **Financial Resources:** Similar to the scale, a provider in the SME sector may not have the financial base that is sufficient to meet the requirements of contracts that are offered to the market. Powerful clients may also resist early payments, effectively treat suppliers as short-term loan banks. The risk of bankruptcy can be high when dealing with large and powerful procurers.

3. **Infrastructure:** The size of the company and the resources it has available to meet the service specification can be a possible barrier to submitting bids for contracts. Affiliations between SMEs can be effective if they pool resources and submit joint bids for contracts that are advertised.

"Really the company needs to be committed and really patient, there is a lot of work to be done, but there is a lot of help out there to support the companies – one of the keys really is finding the right partner”.

Valerie Pondaven, International advisor for Enterprise Europe Network
Barriers to entering the healthcare market

Research performed in the CURA-B project also suggested that service and technology procurers in health and social care were highly conservative. Typically, customers needed ‘a lot of convincing’ before they would trial new products. Procurers were also typically locked into long-term contracts with larger traditional suppliers that were able to guarantee the services they offered. Allied to this, SMEs did not have the resources needed to produce detailed and researched positive cost–benefit cases on behalf of their new products and services.

Specifications are often narrowly defined while tender decisions habitually favour the lowest price over the best or most innovative solution. The procurement system itself is fragmented. SMEs face difficulties in defining who the procurers, commissioners, users and the final ‘customers’ are and find it difficult to gain access to decision makers and end users; there is a general lack of participation and consultation with SMEs. Relationships tend to be defined by contracts rather than partnerships.

The Commissioning of Health and Social Care Services can vary across the country (UK) and from country to country. The basic premise is to enable a commissioning organisation to procure goods and services that meet the need within the guidelines laid down by regulation. The goods and services procured should meet a service specification laid down by the commissioning organisation and represent best value for money. In the public sector, commissioning organisations are bound by Public Procurement regulations and also the organisation’s Code of Practice. The effect is to force public bodies to the lowest price for the fulfilment of the specified solution. Our own experience of the CURA-B project is that public organisations pride themselves on lengthy and detailed specifications that leave suppliers no room for invention. The focus on price and tightly defined requirements squeezes out dialogue, risk and therein, innovation from the procurement process.

The health sector also has various validation processes that new technologies must go through before acceptance - including lab testing. It can take up to two years in France to have a piece of medical technology approved. It is clear that the difference between dealing with consumer markets and hospital procurement is dramatic and that a number of barriers stand in the way of entrepreneurs wishing to cross this particular boundary. On the other hand, valuable public sector contracts can provide financial stability and even the headroom to innovate - so can be worth the extra effort. Care services also gave feedback that SMEs needed to do more to adapt their business models to fit the environment and needed to be more prepared to demonstrate the cost effectiveness and practical benefits of their products. CURA-B found that providers/procurers were not always satisfied with the information and advice they receive concerning deployment, commissioning and after-sales service. The point to take away from this, perhaps, is that firms also need to be proactive in building the capabilities they need to cross into the sectors that interest them.

(Source: CURA-B final report and CURA-B business manual)
Boundary crossing cases from the cluster

Through the work of the partners and the capitalisation process in Biz4Age, a number of cases were identified as exemplars of how to cross boundaries – sector boundaries and borders. The following cases highlight some of the processes for supporting SMEs to cross boundaries and improve healthy ageing.

Table of cases

<table>
<thead>
<tr>
<th>Name of case</th>
<th>Cross Sector or Cross Border</th>
<th>Strategy in Case</th>
<th>Sectors Involved</th>
<th>Region and Partners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Vault/ E day book</td>
<td>Cross Sector</td>
<td>Public-Private partnership</td>
<td>IT to Health</td>
<td>KCC England</td>
</tr>
<tr>
<td>Online platform for medical services</td>
<td>Cross Sector</td>
<td>Knowledge Centre</td>
<td>IT to Health</td>
<td>POM, VIVES, RESOC Flanders</td>
</tr>
<tr>
<td>Mindings</td>
<td>Cross Sector</td>
<td>User Driven</td>
<td>IT to Health</td>
<td>ARU England</td>
</tr>
<tr>
<td>MapMyHealth</td>
<td>Cross Sector</td>
<td>Trojan Horse</td>
<td>IT to Health</td>
<td>KCC England</td>
</tr>
<tr>
<td>Sint Vincenius/Tronixx</td>
<td>Cross Sector</td>
<td>Triple Helix Collaboration</td>
<td>Construction to Health</td>
<td>POM, VIVES, RESOC Flanders</td>
</tr>
<tr>
<td>Green Consulting Inc/ Iluminas</td>
<td>Cross Border</td>
<td>Joint Ventures</td>
<td>Construction</td>
<td>KCC England</td>
</tr>
<tr>
<td>Graffiti Magic</td>
<td>Cross Border</td>
<td>Local Government Driven</td>
<td>Construction</td>
<td>KCC England</td>
</tr>
<tr>
<td>Blends for Friends</td>
<td>Cross Border</td>
<td>Local Government Driven</td>
<td>Food</td>
<td>KCC England</td>
</tr>
<tr>
<td>Fudge Kitchen</td>
<td>Cross Border</td>
<td>Local Government Driven</td>
<td>Food</td>
<td>KCC England</td>
</tr>
</tbody>
</table>
Public - private partnerships

A good example of boundary spanning organisations presented in the project included Kent County Council and Microsoft working in a partnership to deliver an innovative new service on Microsoft’s Cloud-based HealthVault platform. Some organisations and services are from their very conception, multidisciplinary and therefore boundary crossing. In fact, some firms come into being specifically to address the difficulties of getting across boundaries defined by lack of knowledge. The eDayBook application was developed by a health SME, Digital Life Sciences, and the first beneficiary of the service is a local SME, Meritum Independent Living. KCC is in the process of developing a business case to scale the service so that it can provide support to Home Care providers across Kent. Through rolling out at scale, Kent expects to see significant reduction in demand for Social Services with potentially similar reductions in demand for healthcare in the region. The service was designed to support Home Care workers in the delivery of their day-to-day caring. The carers complete the e day book with medications given to the people for whom they are caring and any particular observations they notice which becomes part of the digital Personal Health Record (based on Microsoft’s HealthVault platform), thereby enabling the client and their family/carer to be more engaged in their care and their general wellness and providing data that can be accessed by their clinicians. It is worth noting also that the eDayBook is the result of a partnership which is driven by an identified need. As such it is directly shaped by knowledge of the context of use and the context of production. eDayBook is a project-based boundary spanning partnership that effectively bridges between the context of production and the context of use by, quite literally, existing at that boundary and straddling it. Boundary-crossing in this way allows Microsoft to gain valuable knowledge, local SMEs to develop their business in healthcare and Kent county council to gain a system that responds directly to a social care need.

Knowledge Centre driven partnerships

Another boundary-spanning concept was a portal designed to give access to non-medical services in West Flanders for older people. This pilot case was initiated by an idea that emerged from informal conversations with stakeholders and the knowledge of the research group at the VIVES University College of Kortrijk. The case investigated how a business model could work for an online platform for non-medical services similar to ‘Checkatrade’ - a directory for tradespeople and service providers that conducts strict background checks before trades people can become members. Once they join, members agree to have feedback from their customers put online for everybody to see. The background checks and public feedback ensure that only reliable and trusted trades people get work through the portal. A research activity was setup by VIVES at Kortrijk and supported by RESOC in Bruges to meet with local stakeholders and other businesses with the idea of substantiating the idea of developing a similar service specifically for the over sixties in the Flanders area.

New service concepts, such as the Online Platform for Non-Medical Services, are an example of the creation of a business idea that has boundary-spanning in its DNA. This suggests that we need to stop trying to see organisations as single enterprises like ‘SMEs’ or ‘Universities’. Networks, collaborations and supply chains are the most successful forms of ‘organisation’ in modern economies. In this case the organisation is a service which brings together users and providers through an online space created by the University. The system avoids the need for a detailed knowledge of the context of use and is based instead on the recognition of a need which, in this case, is for trustworthy, reliable service-providers for older people. The online platform is itself the hub of a network designed to allow organisations and individuals to cross the boundaries normally defined by mistrust and lack of knowledge. (Source: CURA-B final report)

Online Platform for Non-Medical Services

The online platform for non-medical services will focus primarily on the elderly living at home. The platform makes the search for reliable service providers easier and this ease and reliability both have a positive and direct impact on the well-being of the user and or/carers. The platform is also a timesaver (ease of search and more efficient way of working for intermediates). For the service provider new market segments emerge for more focused on non-medical services for the elderly. Indirectly the platform helps elderly people to remain at home. The platform also reinforces the concept of community which positively influences social well-being of the individual and the community itself.
Another means by which firms more easily cross boundaries is to begin their journey from a focus on need, rather than technology. Although all firms are driven by some sort of understanding of the user, without some notion of use there can be no technology, firms that have a ‘deep knowledge’ of the context of use always have a competitive advantage over those that do not.

Mindings was such a firm. Mindings had its origins in the very personal identification of a need by a user in this case the personal experience of an ageing parent’s isolation. They were able to combine this with their technical know-how to develop a solution for that parent’s isolation. The problem for this company, however, is a lack of connectivity with larger health care providers. Although the owner was making considerable efforts to build these bridges, for example by holding a trial of the technology for long-term patients at a local hospital, when we interviewed them, the company was struggling to maintain sufficient income from consumer sales. The key to the company’s long-term survival was, according to the owner, contracts with health trusts. However, the difficulties of gaining such a contract reveals the much greater challenges posed by moving across boundaries into some contexts as opposed to others. Based on an existing and well-used consumer device and indeed online services, meant that the service could enter consumer markets without any great problems. Healthcare organisations themselves, however, are cautious, rule-bound, necessarily bureaucratic and therefore, less easy for entrepreneurs to engage with.

This reinforces the observation that all companies exist in boundary spanning networks and indeed that they cannot exist without them and that some contexts are easier to move into than others. Health-care providers, our research suggests, are particularly difficult to penetrate. (Source: CURA-B).
Mapmyhealth® solves Mindings’ boundary problems by straddling the boundary as part of its make-up as an organisation. Mapmyhealth®, much longer established, was already located in healthcare services as a specialist provider. As such it had already built up contacts and knowledge in and about, that context as a result. It was able, therefore, to build and promote user-friendly products by working directly with its customers and users. In many senses, the organisation’s competitive advantage lay partly in being part of stable boundary spanning networks that allow it, and its products, to move freely between the context of use and production.

(Source: 2 Seas Trade)
Forays into new contexts are risky and potentially expensive for small firms. However, not all SMEs are working alone and are in fact already part of established networks of ownership within which they are more properly business units than independent firms. Large multinational organisations offer stability, pre-existing networks and financial backing that can benefit small firms greatly. At the same time, small firms can act as pathfinders for their parent companies into new contexts that are of strategic interest - such as healthy ageing.

Companies like Tronixx are thus able to engage with trials at a financial loss. In the case of this trial the issue for them was building legitimacy for their technology in a new context - that of care homes - by involving a care home in a technology trial and a university to independently assess the results. This is another means of crossing boundaries into new contexts but one that is less available to smaller independent entrepreneurs.

(Source: CURA-B final report)
The Environord case demonstrates yet another means of crossing boundaries – by being part of the network of firms which inter-recommend one another. Regional support agencies like Kent County Council can play an import role in creating the introductions that will help build these boundary-spanning relationships. (Source: 2 Seas Trade project)

Joint Ventures

Green Consultancy Incorporated (GCI), a Kent based energy solutions provider and Iluminas, an innovative lighting company from Belgium both exhibited at Environord 2013 on the 2 Seas Trade stand which showcased the latest technology and innovative solutions for Waste and Recycling, Energy Recovery, Water, and Construction and Sustainable Urban Development. The 2 Seas Trade Project had provided both companies with the opportunity to exhibit for free as part of a larger project stand. Having met at Environord these 2 companies have now collaborated to assist each other in distributing their products in the UK, mainland Europe and around the world. GCI had existing contacts with a company supplying lighting to a steel works site in the UK and subsequently recommended LED lights from Iluminas as an alternative, more efficient lighting solution and these are now on trial at the steel works site. A trial of Iluminas lighting is also underway for a UK local authority with the potential for these to be used to reduce the energy consumption of street lighting. As a result of this collaboration there are also several potential joint installations at a large sports venue and hotel chain in the UK. Iluminas has assisted GCI in tendering to supply a range of public installations in an Asian market and the collaboration could also lead to up to 35,000 installations of both companies’ products in Africa too. The 2 Seas Trade Project has therefore enabled these innovative businesses to work together on a range of joint ventures, well beyond the European market.
Kent County Council has acted as driver and facilitator of many successful attempts at crossing borders and boundaries. The Kent approach to firm support shows that established, stable firms require surprisingly little support to make the journey across national boundaries - a simple introduction to the right partner or customer and an opportunity to demonstrate their product, may well suffice. A distinct difference between the CURA-B and 2 Seas Trade project was the longevity of the firms with which they dealt. The start-ups and early stage entrepreneurs that CURA-B dealt with required much more complex support and indeed offered different opportunities for intervention. The lesson here is that if cross border support wants to work for start-ups it needs to go beyond introductions and toward network building and on-going Quadruple Helix activities and relationships that happen to straddle international boundaries. As the Tronix case shows, success regionally may require going beyond working with SMEs and instead working with partners that have the financial strength to support international operations involving local authorities, local universities and local citizens. Measures of success may also need to move the focus away from individual firms and toward measures of successful international network collaborations.

**Graffiti Magic**, is a Kent based manufacturer of permanent water washable anti-graffiti coatings, that was looking for distributors across Europe. Graffiti Magic exhibited as part of the 2 Seas Trade project at the Ecobuild 2012 trade fair. Ecobuild is the world’s biggest event for sustainable design, construction and the built environment held annually in London. Following participation at Ecobuild, Graffiti Magic owner John Townsend met a number of European distributors who could potentially supply their products.

**Blends for Friends** specialises in custom-made tea blends created for individuals, corporate clients and the catering sector and was looking to expand its business through exporting to retail chains, tea shops, hotels and tea rooms within Europe. With the help of the 2 Seas Trade project, the company decided to exhibit at the TAVOLA 2012 fine food trade fair in Kortrijk, Belgium. As a direct result of the contacts made at the trade fair, Blends for Friends is now successfully doing business with a high-end Belgian catering/events company.

**Fudge Kitchen** specialises in a wide range of premium handmade fudge products which include original fudge, fudge sauces and drinking fudge. The company have been producing fudge using traditional methods since 1983. In 2012, as part of the 2 Seas Trade Project, the company also attended the Tavola fine food trade fair which took place in Kortrijk, Belgium. Fudge Kitchen made several key new contacts as a result, one of which led to the appointment of a major Dutch distributor. This distributor continues to act as an advocate of gourmet fudge throughout Belgium and the Netherlands. Another contact led to a contract with a large chain of French Delicatessen that stock British and Irish products.

"Working across professional teams leads to cross fertilisation and this is better to create wider accepted ideas and accepted solutions. This enables us to valorise our knowledge for tomorrow and further more it’s possible to integrate the results in our lessons”.  
**Joris Hindrycky, Director of University, VIVES**

(Source : 2 Seas Trade project)
Contemporary ‘smart’ policy making relies on regional policy frameworks for innovation-driven growth that emphasizes “entrepreneurial discovery”: an interactive and innovative process in which market knowledge and entrepreneurship, together with knowledge centres, discover and produce information about new activities. A strong message coming from the Committee of the regions (Cor) is that there is a huge gap between the latest research knowledge and real-life practice. Traditionally, innovation was closely linked with product development, thus being mainly the responsibility of the business sector. Now, in the knowledge society, knowledge centres are taking a more prominent role in innovation, especially in creating favourable conditions for open-innovation collaboration and co-creation amongst the Quadruple Helix partners.
Regional success requires targeted intervention from support agencies.

This is particularly true when firms are high on the innovation risk scale, still young and struggling to attract funding, can be highly vulnerable and need partners - during this time they need sophisticated support (see diag. 1).

In Biz4age we have seen a need for the development of rich heterogeneous regional support mechanisms’ where public, private, knowledge centres and third sector actors learn to collaborate together in what has been termed the Quadruple Helix. In Biz4age we are interested in reporting on how this can be done in practice - through intensive collaboration between SMEs, knowledge centres and care institutions, facilitated by various organizations (like our partner organisations: POM, Impuls and BSK) and relevant local authorities (like KCC).

Two examples in Biz4age are the roles played by POM west Flanders and Economic Impuls of Zeeland. Both organisations have cultivated a cluster of actors from their provinces. Their focus is not only on stimulating co-creation but also in the deployment of existing opportunities to invest in work organisation and training, research and innovation, infrastructure and equipment. Both organisations have played a key role in facilitating and encouraging co-creation between businesses, healthcare and research institutions.

Biz4age has been extending the work of Cura-B and 2 seas trade in prioritizing regional activities and strengthening the base for focused activities through European-wide strategic partnerships. This has been done by focusing more on societal challenges. The best laboratories for breakthrough innovations today are no longer traditional university research facilities but regional innovation networks operating as test-beds for the prototyping of user-driven innovations. Innovation strategies focus on catalysing open innovation and encouraging individuals and communities to drive bottom-up innovation initiatives. These new entities within this collaborative approach include: incubators, accelerators and Living Labs.

They combine new, open operating practices, use of social media, flexible intellectual property rights and funding practices, a broad stakeholder network and entrepreneurship. We can view living labs as means of creating multiple bridges between different contexts to allow learning and innovation. Examples from the cluster partners include the Zeelandic living room, the smart Living accelerator in Essex, the Kent innovation Hub and Pioneer projects and the important networks built in Zeeland by Impuls, in w. Flanders by POM, and in the East of England AT network.

Through the work of the partners and the collaboration process in Biz4age, a number of cases were identified as exemplars of how smart specialisation is being implemented. The following cases highlight some of the models by which this is occurring.

### Targeted support tool

<table>
<thead>
<tr>
<th>Investment risk</th>
<th>Introductions through trade fairs, unsupported trials</th>
<th>Building the firm into temporary networks of support that will help valorise the technology in its markets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Support to attend trade fairs, more targeted support there to gain contracts, promote their equipment</td>
<td>Incubator support, identifying sources of funding for R&amp;D (eg. EU funding)</td>
</tr>
<tr>
<td>High</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Start up
  - Introductions through trade fairs, unsupported trials
  - Support to attend trade fairs, more targeted support there to gain contracts, promote their equipment
- Mature firm
  - Building the firm into temporary networks of support that will help valorise the technology in its markets
  - Incubator support, identifying sources of funding for R&D (eg. EU funding)
- Longevity
  - Introductions through trade fairs, unsupported trials
  - Support to attend trade fairs, more targeted support there to gain contracts, promote their equipment
West Flanders has a strong concentration of research and engineering services focusing on the development of ‘future-proof’ healthcare infrastructure. An example of a successful partnership is the PRoF consortium which brings together members that are complementary and that are constantly engaged in innovation, for example, the ‘Personalized Residence of the Future’, ‘Patient Room of the Future’ and ‘Private Care Room of the Future’. (Source: www.prof-projects.com)

<table>
<thead>
<tr>
<th>Name of case</th>
<th>Cross Sector or Cross Border</th>
<th>Strategy in Case</th>
<th>Sectors Involved</th>
<th>Region and Partners</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRoF Consortium</td>
<td>Cross Sector</td>
<td>Business driven innovation</td>
<td>Engineering to Health</td>
<td>Example from West Flanders</td>
</tr>
<tr>
<td>de Zeeuwse Huiskamer</td>
<td>Cross Sector</td>
<td>User driven innovation</td>
<td>Construction and AT to Health</td>
<td>Impuls Zeeland</td>
</tr>
<tr>
<td>Smart Living Accelerator</td>
<td>Cross Sector</td>
<td>Knowledge Centre driven innovation</td>
<td>Construction and AT to Health</td>
<td>ARU East of England</td>
</tr>
<tr>
<td>Kent Integrated Care-Pioneer</td>
<td>Cross Sector</td>
<td>Local government driven innovation</td>
<td>IT to Health</td>
<td>KCC England</td>
</tr>
<tr>
<td>Kent Integrated Hub</td>
<td>Cross Sector</td>
<td>Local government driven innovation</td>
<td>IT to Health</td>
<td>KCC England</td>
</tr>
<tr>
<td>CASA</td>
<td>Cross Border and Sector</td>
<td>European Network driven</td>
<td>IT to Health</td>
<td>KCC England</td>
</tr>
<tr>
<td>ENGAGED</td>
<td>Cross Border and Sector</td>
<td>European Network driven</td>
<td>IT to Health</td>
<td>KCC England</td>
</tr>
<tr>
<td>East of England AT Network</td>
<td>Cross Sector</td>
<td>Facilitator Organisation driven</td>
<td>AT to Health</td>
<td>ARU England</td>
</tr>
<tr>
<td>Santé Zeeland</td>
<td>Cross Sector</td>
<td>Facilitator Organisation driven</td>
<td>AT to Health</td>
<td>Impuls Zeeland</td>
</tr>
</tbody>
</table>
De Zeeuwse Huiskamer (The Zeelandic Living Room) is a project where three living spaces have been explored in Zeeland. In these living spaces residents and experts are researching the future of people who are in need of some form of care. It is a collaborative project exploiting user driven innovation with the aid of local companies, authorities, care organisations and knowledge centres.

Source: www.dezeuwsehuiskamer.nl

**The living space at Goes** is designed for people in need of care who currently live independently, but may not be able to do so in the near future unless some adjustments are made to their living conditions. It consists of an apartment with two bedrooms and a large 40m² living room and an open kitchen. The residence has been made wheelchair accessible and lines of sight take wheelchair users into account. The aim is to experiment with what adjustments need to be made in the field of care and the social lives of the residents.

**The living space at Terneuzen** is designed to house those over 60 with or without need for care and for several younger residents with a need for care. The apartment is situated at ground level and looks out on a lawn and small garden. The residence has been completely refurnished with modern furniture that leaves enough space for rollators or wheelchairs. The aim is to show in practice what forms of innovation are possible for those with a limited budget and to prove that people can live independently for a longer time through the provision of low-cost special facilities.
The Anglia Ruskin Smart Living Accelerator brings new thinking and action together uniting stakeholders across health and social care, industry and academia to enable user-centred solutions. The MedTech Campus is working with technology firms, health commissioners and frontline service providers to break down the barriers that have in the past prevented new technology from being implemented into UK health and social care systems. The Smart Living Accelerator uses ARU’s Postgraduate Medical Institute to carry out research on how technology can help people to manage their health conditions and live independently in their own homes for as long as possible. Evaluation labs enable users and providers to come together to shape and develop these initiatives and service providers work in partnership to trial any new measures.

Three pilot projects are currently running. The first, ‘The Informed Patient’, aims to produce an information portal for people diagnosed with the early stages of dementia to enable them to go to one place to find out more about their condition, how it is likely to progress and what support is available to them. Another project, Sensor to Decision, is targeted at those suffering from long term conditions such as coronary heart failure and type-2 Diabetes. The third, Cost of Loneliness, will look to provide a face-to-face video system, over a secure intranet, for people who identify themselves as lonely. Studies have shown loneliness compounds existing conditions and has resulted in increased mortality rates. (Source: www.medtechcampus.com)
The Kent Innovation Hub is a network of organisations across health, social care, the voluntary sector, industry and academia - locally, nationally and internationally who share good practice, tackle key challenges and aid the development and implementation of solutions for service change. The Hub is a central communication network, with most activity hosted virtually through Tweet chats and webinars with additional workshops and conferences, focussing on themes that support the Integrated Care and Support Pioneers programme. The Hub has provided a mechanism to engage the public and others in helping establishing an integrated health and social care system.

The Kent Integrated Care and Support Pioneer shows the critical role with local authorities can play as a point of passage across which firms can begin delivering services to older-citizen markets. Not only is Kent a customer for these services directly but it is also a gateway and standardising agent that will have the effect of building particular capabilities in the region that will then underpin smart specialisation. Once built, these services, along with the firms associated with them, can be developed in other regions. The firms themselves, having learned from experience, can also go on to sell services of a similar nature in other regions and potentially internationally, in the way that a number of US firms are now doing in the UK. One of the capacity building roles which local authorities can play is to ensure that regional firms are in a strong position to bid for contracts and that their networks extend internationally.

Source: www.kent.gov.uk/social-care-and-health/...for.../kent-innovation-hub

CASA was an Interreg IVC project that aimed to develop a new generation of innovative, personalised care solutions, using technology, for the elderly at home and outdoors. 14 participating organisations from 13 European regions led by the Flanders ministry of Health were able to share best practice and develop 'joined-up solutions' and implementation strategies. CASA focussed on the development of regional policy and exchange of knowledge around the up-scaling of innovative ICT solutions and services for independent living. The project ran from January 2012 to December 2014 and was part-funded by the Interreg IVC programme for interregional cooperation. The project consisted of study visits, exchange of good practice, staff secondments and dissemination events on particular themes including monitoring, safety and self-management, social interaction, chronic diseases, healthy lifestyle and rehabilitation, informal care, telemedicine evaluation models, mobility and liveability-integrated regional policy, business and knowledge development, user driven innovation through public private partnership and large scale deployment. Partners were able to identify best practice to transfer to their region by attending the study visits and by taking part in a 'speed-dating’ exercise arranged by the Transfer Task Force. Each region completed a regional implementation plan to specify how they would integrate the lessons learnt from the project into its local, regional or if relevant, national policies.

(Source: CASA www.casa-europe.eu)
Engaged

ENGAGED is a Thematic Network designed around a learning community of stakeholders, from different backgrounds and from across different European countries, to nurture the emergence of innovative and sustainable active and healthy ageing (AHA) services that make best use of technology. It is a network of networks with 15 partners that are either specialist EU-level networks active in the field of active and healthy ageing or key regional, research and knowledge partners. Each partner brings access either directly or through its members to front-line experience, or they offer key skill sets related to community building, digital engagement, research and analysis. Source: http://engaged-innovation.eu

East of England Assistive Technology Network and Santé Zeeland

The East of England Assistive Technology Network (a pilot project from CURA-B) brought health and social care providers, patient representatives and industry together in one forum to share learning and facilitate opportunities for collaboration between providers of care and companies in the AT market. The network provides a forum for business to access health and care providers within the UK market to understand unmet needs and collaborate on developing solutions to those needs. The network meets regularly to discuss themes such as how to engage patients and users through education, how to build successful collaborative partnerships and how to address the barriers to the uptake of assistive technology at scale, whether that be specialist medical technology designed to help manage a clinical condition independently, or non-medical technology such as communications and IT which is adapted to meet a specific need.

Source: www.hee.org.uk

Santé Zeeland also arose as a pilot project from CURA-B. N.V. Economische Impuls Zeeland learnt from the initial research phase in CURA-B that there was a demand for a new platform where different sectors can meet each other. Santé Zeeland was launched as a network of SMEs, providers of health and social care, schools and universities, local authorities and individuals, willing to empower each other in facing future challenges and to stimulate the Zeeland care economy by linking together different sectors: health care and industry; education and government.

CASA and Engaged, while not directly part of CURA-B or 2 Seas Trade, were brought to this project’s attention because of their activities in building knowledge, identifying problems and sharing best practice across a number of different boundary spanning projects. This is in fact the key role that European Union funding can play. Smaller scale regional activities such as the East of England Assistive Technology network and Sante Zealand play a similar and vital role in bringing different actors together to exchange knowledge on markets, needs and technologies. The opportunity is not only for knowledge exchange but making contact with potential customers and potential suppliers and indeed partners for example universities and local authorities.

What all of the above projects do is create networks which allow and facilitate interaction between different aspects of the Quadruple Helix. More especially, such network organisations act as neutral ‘disinterested’ spaces where different organisations, public and private, can meet, exchange ideas and innovate. One of the key findings of our research was the important role that in particular higher education institutes and development agencies can play in such exchanges. HE institutes and local authorities are a trusted broker between private sector solutions and market and public need. Interestingly, in the UK the closure of Regional Development Agencies has led to a flurry of activity in the formation of lobbying and fee-paying membership-only representative bodies - demonstrating a need for this sort of role.

Source: www.hee.org.uk
CHAPTER 7
Remaining Gaps in Our Knowledge

The aim of Biz4Age has been to gain a better understanding of how firms can cross boundaries and help public services in health and social care deliver better solutions to the demands of healthy ageing.

The initial bringing together of the CURA B and 2 Seas Trade projects identified that firms, whether innovators seeking to work in new markets or firms seeking to cross international boundaries, have similar support needs.

The publication sought to identify these needs along with the strategies adopted by firms in helping themselves. Together, our projects made it clear that firms at different points in their own evolution and undertaking different levels of technological risk, needed different mixes of support.

Through cross border exchanges of good practice the cluster identified a repertoire of mechanisms aimed at helping firms into new markets, regions and contexts. The cluster also identified specific sectors, namely, food, building and tourism, that were felt to be important sectors for SME business opportunities in healthy ageing that could take advantage of regional smart specialism through Quadruple Helix collaboration.

One key lesson from the conference workshops was that different actors in the Quadruple Helix struggle to understand each other. In ‘Build and Care’, ‘Food and Care’ and ‘Tourism and Care’ we find that SMEs struggle to understand their customer’s desires, needs and priorities.

What is lacking is a nuanced understanding of precisely how customers, local authorities, private sector firms, policy makers and universities can best work together to identify solutions, build knowledge-sharing networks and build capacity - not least as they try to understand key societal challenges like healthy ageing, identify and build Smart Specialisms and look for possible sectors where these challenges and specialisms might come together, as this cluster did with ‘Build and Care’, ‘Food and Care’ and Tourism and Care’. Underpinning the idea of smart specialisation is the notion that entrepreneurial knowledge should be accessed and used to drive innovation, capability and growth in the regions. Further research, we argue, should identify and experiment with new and innovative mechanisms for encouraging collaboration at a regional level.

Once this is underway, it is essential to understand more about how opportunities for collaboration, learning and network building can best be capitalised upon particularly through cross border exchange of identified good practices. In other words, what sort of collaborative contexts work for what sort of outcomes, what factors shape the quality of the interactions in those contexts and what processes or practices can be modeled and how can we share these across regions and borders?
Improvements are needed that underpin independence, life-style and care provision for both patient and carer in terms of:

1. Increased choice of care pathways
2. Monitoring the condition and well-being of an individual for early intervention
3. Providing health and social care professionals with information they need to assist in the delivery of care

4. Increasing the health and well being of the ageing population
5. Helping the old to live independently longer
6. Building services (public and private) that support wellness and which combat ill-health and loneliness.

One of the core themes of this publication has been to identify the lessons our projects contain for crossing boundaries - be they international (cross border) or across different contexts in the same region. By this we mean examining the means that already exist for supporting firms in learning about, and doing business in, new contexts such as healthy ageing and doing such business across the 2 Seas area. It is also clear that, on the one hand, services and technologies need to become more demand-based, but on the other hand entrepreneurs find it is difficult to get close to the markets and users that interest them. It is essential to find ways to bring these
needs to the attention of designers and policy makers in a rich and actionable way. It is similarly essential that users, carers, health and care professionals can all engage with the process of improving what's on offer.

Knowledge, co-creation and co-learning are critical to building robust, effective and targeted innovation systems. Successful firms, it transpires, understand the importance of the ‘deep-knowledge’ of the markets and contexts to being competitive and there is nothing like being in a context, through a trial, building a new boundary spanning enterprise or meeting those already in that context to build networks and partnerships both intra regionally and inter regionally. Successful firms also grasp the importance of strategic partnerships to support boundary-crossing activities. Moreover, in selling to often hard-pressed and sometimes anti-innovation environments, firms need to take advantage of ‘neutral’ actors, such as universities, to valorise and support new innovation.

We also find that ‘crossing boundaries’ is essential for innovation and for the good health of firms themselves. Companies that cross boundaries in search of new opportunities, be they abroad or into new organisational contexts, are inherently more entrepreneurial and forward-looking than those companies that do not. Those companies that remain moribund in the safe well-trodden contexts in which they first emerged, will ultimately be left behind as technology and demand moves on. Crossing borders is a fundamental element of crossing boundaries.

Here we see that there is a need for public sector support to facilitate information gathering and to facilitate promotion, contacting and the development and sales process via the building and hosting of networks and traditional trade shows and visits.

The value of building organisations which are inherently cross-boundary, for example, organisations based around value chain propositions or networks that extend across multiple boundaries, creating multidisciplinary teams and innovation from their very inception, cannot be underestimated: no firm can be an island. In this competitive, globalised economy, there is a safety in networks, collaboration, open innovation and partnerships. Those regions with the most effective networks of public and private organisations are the ones that will prosper. Universities, development agencies and member-based regional support agencies can help firms build networks, indeed can become part of those networks, that extend into the contexts and regions in which they want to do business. Moreover, the smart specialisation that regions themselves want to build will clearly not be built on small numbers of large firms. The days of the vertically integrated mega-corporation are over. We are now moving to adaptive, contingent networks comprised of a cocktail of public and private organisations performing various functions within Smart Specialisation.
2 Seas Trade: http://www.2seastrade.eu/events/event/Innovation-for-independent-living-and-the-ageing-population

Blends for Friends: www.blendsforfriends.com

CASA: www.casa-europe.eu/

CURA-B final report: http://www.cura-b.eu

CURA-B Business Manual: www.cura-b.eu

East of England AT Network: www.hee.org.uk

Engaged: http://engaged-innovation.eu/


Fudge Kitchen: www.fudgekitchen.co.uk

Graffiti Magic: www.graffitimagic.com

Green consulting inc: www.GCLimited.co.uk

Health Vault/ E day book: www.healthvault.com

Online platform for medical services: www.cura-b.eu

Huiskamer- Zeelandic Living Room: www.dezeeuwsehuiskamer.nl

Iluminas: www.iluminas.com


INSEE Première: Projections de population pour la France métropolitaine à l’horizon 2050, N° 1089 - JUILLET 2006


Kent integrated hub: www.kent.gov.uk/social-care-and-health/.../kent-innovation-hub

Mindings: www.mindings.co.uk

MapMyhealth: www.mapmyhealth.co.uk

Prof consortium: www.prof-projects.com/

Report on Global Ageing 2014 Ris 3 Zuid-nederlandse 2013 Statiss France 2013


RIS 3 Zuid-Nederlandse 2013, Statiss France 2013

Sante Zeeland: www.impulszeelnad.nl

Sint Vincenius/Tronixx: www.cura-b.eu

Smart living Accelerator: www.medtechcampus.com

Two Seas Trade: http://www.2seastrade.eu/events/event/innovation-for-independent-living-and-the-ageing-population)
ANNEX 2 Glossary of abbreviations and acronyms

ARU Anglia Ruskin University
B2B Business to Business
Competencies The ability to consolidate skills (in this case techniques for managing Helix interfaces) and resources into repeatable, but hard to replicate, value-adding habits, activities and processes
COPD Chronic Obstructive Pulmonary Disease
COR Committee of the Regions
ERDF European Research and Development Fund
Imuls Economische Impuls Zeeland
EU European Union
KCC Kent County Council
POM West Flanders Development Agency
Quadruple Helix The actors of the so-called quadruple helix model, i.e. the public sector, the business community, the higher education institutions and civil society
RESOC Regional socio-economic consultation committee (Bruges)
SMEs Small and Medium-sized Enterprises
SSS Smart Specialisation Strategy
Triple Helix The actors of the so-called triple helix model, i.e. the public sector, the business community and the higher education institutions
VIVES University College Flanders

Partner organisations in Biz4Age

www.anglia.ac.uk  www.bsk-cic.co.uk  www.pomwvl.be
The contents of the publication reflects its authors’ view and do not necessarily reflect the opinions of the institutions of the European Union.

This text in this publication is for information purposes only and is not legally binding. This publication is entirely financed by the European Regional Development fund (EDRF) through the INTERREG IV A 2 Seas Crossborder Programme.
For further information on the Biz4Age Cluster visit: 
www.biz4age.eu

For further information on the 2 Seas Programme, please visit:
www.interreg4a-2mers.eu

INTERREG IV A 2 Mers Seas Zeeën
Secrétariat Technique Conjoint / Joint technical Secretariat / 
Gemeenschappelijk Technisch Secretariaat
Les Arcuriales – 45/D, rue de Tournai – 5 étage – F-5900 Lille
T: +33 (0) 3 20 21 84 80 – F : +33 (0) 3 20 21 84 98
contact@interreg4a-2mers.eu

The Interreg 2 Seas Programme is an EU funding programme which promotes crossborder co-operation between partners from France, England, Belgium (Flanders) and The Netherlands. It aims to develop the competitiveness and the sustainable growth potential of maritime and non-maritime issues through the establishment and development of cross border partnerships.