

## Action plan

### Part I – General information

Project: HELIUM

Partner organisation: BRAINPORT DEVELOPMENT N.V.

Country: The Netherlands

NUTS2 region: Noord-Brabant

Contact person: Mr. Tim Daniels

email address: t.daniels@brainportdevelopment.nl

phone number: 00 31 6 27 22 74 69

### Part II – Policy context

The Action Plan aims to impact:

- Investment for Growth and Jobs programme
- European Territorial Cooperation programme
- Other regional development policy instrument

Name of the policy instrument addressed: Interreg VA Flanders-The Netherlands 2014-2020

The Regional Action Plan which has been drafted by Brainport Development in the context of the Interreg Europe project 'HELIUM' is primarily aimed at influencing the Interreg VA Flanders – The Netherlands Cross-border Cooperation Programme 2014-2020. The programme is dedicated to solving problems or overcoming challenges in the border region between Flanders (BE) and the South Netherlands (NL) as well as promoting interregional collaboration between actors from the two regions. Geographically speaking, Flanders represents five provinces (West-Vlaanderen, Oost-Vlaanderen, Antwerpen, Vlaams-Brabant and Limburg), while the South Netherlands represents three provinces (Zeeland, Noord-Brabant and Limburg).

HELIUM's overall objective is to increase the efficiency and efficacy of public funding dedicated to health innovation. While both Flanders and the South Netherlands have excellent capacities and potential in healthcare & wellbeing, addressing health innovation in a cross-border context can be challenging. Based on the Good Practices and the lessons learned from other regions within the HELIUM project, policy recommendations will be made to strengthen the attention for cross-border health innovation.

The Interreg Flanders – Netherlands programme has produced a Samenwerkings-programma, or Collaboration Programme (CP) which serves as the reference document for the implementation of the programme with special attention for the different goals and specific priorities of the programme, as well as the working methods of the programme, to ensure that it contributes to the EU strategies for smart, sustainable and inclusive growth and supporting economic, social and territorial cohesion.

The current Collaboration Programme has been shaped based on an analysis of the needs and challenges facing the programme area, European goals and recommendations, as well as regional and national policy frameworks. This has led to the development of Priority Axis and corresponding thematic goals to which funding has been linked.

The Priority Axis are;

- Smart growth (Innovation) with two thematic goals;
  - Stimulation of Research and Development by further developing/expanding existing infrastructure and collaboration between knowledge institutions.
  - Valorisation of knowledge and innovation through industrial research and experimental development through collaboration between companies and knowledge institutions.
- Sustainable growth (Energy) with three thematic goals;
  - Promoting energy efficiency and renewable energies in businesses
  - Promoting energy efficiency and renewable energies in public infrastructure, including the housing sector
  - Innovation for low-carbon technologies
- Sustainable growth (Environment and Resources) with three thematic goals;
  - Protecting, improving and restoring of biodiversity and quality of terrain, water and earth
  - Innovation for the improvement of the environment and efficient handling of resources
  - Promoting efficient use of resources in businesses by stimulating adjustments of production processes
- Inclusive growth (Labour Mobility)
  - Improving the supply and demand on the labour market in the border region

In total € 305 million EUR will be invested through European ERDF funds and national co-financing. The analysis of the programme area clearly highlights the challenges facing the border region, which is led by the necessity to improve the competitiveness, increasing sustainability, and an improved functioning of the cross-border labour market. Throughout the different Priority Axis, participation of businesses (SMEs) is a high priority.

Despite having experienced over 20 years of unrestricted mobility of persons and goods across the border, and despite the programme area having one common language (ineffective communication can be a barrier in and of itself), we are still dealing with a border. The cross-border infrastructure is clearly ready to receive improvements, and less physically speaking, the labour market is still largely organized from a national perspective, with few instruments or mechanisms which try to control or moderate the labour market in the cross-border region.

### **SWOT analysis and other context**

In the context of HELIUM, all partner regions conducted a SWOT analysis relating to both the policy instrument tackled in the region, as well as of regional characteristics. The regional SWOT analysis shows us that the challenges facing health innovation lie primarily in improving competitiveness, strengthening the implementation capabilities and scaling up of innovations (i.e. reaching substantial mass). Currently there is a gap between successful pilot projects and the successful positioning of healthcare innovations on the market, with scale size becoming increasingly important. Following a piloting phase, innovations must quickly generate sufficient traction in order to scale-up effectively. The interchangeability of data plays an increasingly important role in the building-up of purposeful databases, which would allow further analysis to enable more focused interventions. Cross-border collaboration can greatly contribute to achieving this required scale.

#### *1 – Purpose Economy*

A recent inventory showed that there is a strong movement in North-Brabant towards the Purpose Economy; a form of entrepreneurship in which social and business objective are inseparably integrated. The Purpose Economy not only strives for financial results, but also crucially social and/or ecological results. The Purpose Economy entrepreneur has an intrinsic motivation to strive for social improvement with the company, something which is woven into the very fabric of the entire business as a whole. This inventory demonstrated

that a large portion of these Purpose Economy entrepreneurs are active in the field of healthcare and wellbeing and as such develop and offer innovative products and services for the healthcare market. This group however, encountered several specific bottlenecks in finding, among other things, (growth)capital, appropriate forms of funding, and market expansion.

This movement in the direction of a Purpose Economy fits well with the new European and national policy initiatives to stimulate innovations which tackle or address major social themes; mission-driven innovation policy. Health, vitality and care is one of these themes, where breakthroughs are of the utmost importance. For a new Interreg Flanders – Netherlands programme, a mission-driven approach can optimize the impact of innovation as good alignment with European and national policy can be achieved. In concrete terms, this means that clear missions need to be drawn up for a number of identified social challenges within the programme area.

## *2 – Declaration of Intent Provinces of Antwerpen and Noord-Brabant*

The administrative agreement of the Province of North-Brabant 2014-2019 explicitly states that (translated from NL to ENG) ‘innovation is not only something pertaining to the drawing boards, but also has an element of ‘messing around’ and experimentation. Facilitating this requires a space for experimentation, for testing and development in a creative environment outside of the traditional laboratory environment.’ ‘In order to actually realise breakthroughs, we need to innovate socially, try out new things together and dare to take risks.’ ‘We do this through our efforts vested in Living Labs.’ ‘The traditional laboratory is no longer a confined or detached world of expertise from the Brabant industry and sciences, rather a living laboratory, a living lab.’

Based on this Provincial policy, a Declaration of Intent was signed between the Provinces of North-Brabant and Antwerp in the autumn of 2018 to explore and elaborate on the cooperative possibilities in the fields of health innovation, living labs, transnational cooperation, interregional ecosystems and purpose economy / social entrepreneurship and the labour market.

The Province of North-Brabant and the Province of Antwerp are the two largest and most defined regions within the Interreg Flanders – Netherlands programme. This Declaration of Intent is in substance aligned with the Regional Action Plan produced by Brainport Development. The influencing of the Interreg Flanders – Netherlands programme with the actions described in this Regional Action Plan, is directly supported by the agreements made in this Declaration of Intent.

## **Part III – Details of the actions envisaged**

### **Action 1 – Strengthening the cross border living lab infrastructure.**

Mission driven innovation guarantees the connection between innovation and societal challenges, this can also be the case for the Interreg Flanders – Netherlands programme. Complementing mission driven innovation policy, living labs allow development in close cooperation with citizens/end-users and all other stakeholders involved, components which are crucial.

The popularity of mission driven innovation policy combined with the overall learnings of the good practices defined the major action of this Regional Action Plan: Strengthening the cross border living lab infrastructure in the Interreg VA Flanders – The Netherlands area.

In this Regional Action Plan, Brainport Development draws attention to the elaboration and embedding of a cross-border living lab infrastructure for healthcare innovation, a model which could be replicated across other domains such as Mobility, Energy, Food and Security. The emphasis is on strengthening the living lab infrastructure within the Interreg Flanders – Netherlands programme area.

Advantages can be achieved through a better distribution of innovations (both in implementation and scaling-up), strengthening the innovation infrastructure and innovation instruments through cross-border collaboration between Flanders and the Netherlands, and a better connection between social challenges in healthcare and innovation.

## General recommendations

Strengthening the links between the care living labs in the cross-border region and embedding them in the Interreg VA Flanders – Netherlands policy instrument. The healthcare living labs can serve as an example for, and crucially in, collaborations with living labs specialised in different domains, such as, for example, Mobility. The long-term ambition is to stimulate cross-border innovation infrastructure, to continue to strengthen the innovation capabilities of the region, allowing innovations to become less dependent on project and incidental subsidies.

The starting points are:

- Structuring of innovation infrastructure in such a way that it meets the societal challenges and formulated missions. User-centric, open innovation, cross-sectoral, and systematic co-creation with users in real-life communities are key principles.
- Giving living labs a role in making the connection between education, applied research and the labour market by involving all three pillars in innovation.
- The cross-border living lab infrastructure will allow better dissemination of knowledge originating from education and knowledge institutions across the border and further into the programme area.
- Encouraging the exchange of data by fine-tuning methodologies and protocols within the living labs.
- Supporting and further dissemination of Good Practices which have an impact on the vitality of citizens and/or an impact on the regional economy.
- Bringing together companies/businesses, governments, knowledge institutions, investors and citizens from both sides of the border to collaborate on concrete innovations.
- Stimulating cross-sectoral collaborations in order to encourage disruptive innovations.
- Expanding and elaborating on the cross-border healthcare living lab through the deployment of the Provincial Networks to reach a larger target audience. This benefits business in making their innovative products and services accessible to others.

Joint conceptual development related to training on the use of innovative products and services (education), which not only promotes the dissemination of innovations, but also ensures that active personnel becomes familiar with new (technological) applications in their work domain.

## HELIUM Good Practices

Within the HELIUM project a search was conducted for Good Practices which bear inspiration for the positive influencing of the Interreg Flanders – Netherlands programme, which would allow the policy to better support necessary care innovation (projects). Subsequently, this would allow the Interreg Flanders – Netherlands programme to be better aligned with regional characteristics, ensuring that resources are spent more effectively and with more efficacy. The Good Practices selected are:

### Cross Care Programme (BE/NL)

Cross Care supports the development and implementation of care innovations by offering cross-border living lab infrastructure (always a Dutch and Flemish living lab) and subsidy (between € 15,000 and € 200,000; SMEs up to 50%, large companies up to 40% subsidy). There are seven waves planned between 2016 and 2019 in which companies and healthcare organizations can submit their project.

Cross Care offers entrepreneurs successful living lab methodologies to support their development of innovative health products or services in both Flanders and the Netherlands. These entrepreneurs experience the development paths in both markets (in Flanders and in the Netherlands) which is experienced by them as a great added value to secure rapid introduction of their innovative products or services to the market(s). This cross-border approach is essential in this Regional Action Plan.

The Cross Care project confirms that not only is there interest from SME's to make use of living labs as a valorisation/development tool (160 applicants in three calls), but also that they are able to accelerate their innovation process through the use of the living lab approach. Various SME participants were able to realise serious external investments after participation in the programme, bringing them closer to the markets. The

SME's also underlined the importance of being active in both the Dutch and Flemish markets for future and further development.

#### LiCalab/Care Living Labs Flanders (B):

LiCalab demonstrates how the living lab methodology can act as an accelerator of health innovation products/services. The structure and approach of LiCalab also forms the basis of a cross-border living lab, as envisaged with this Regional Action Plan.

The learning from LiCalab is that a living lab needs a proven methodology to provide effective support to companies and care institutions. Based on this underlying methodology it is possible to design a customized approach for each study.

#### (Brainport Health Living Lab) / LifeLabs (NL):

LifeLabs is an initiative of the Cooperative Slimmer Leven 2020, which tries to tackle social innovation issues with organisations/businesses and citizens through this living lab.

For businesses, LifeLabs offers various disciplines and areas of expertise necessary for innovation, to help these businesses to overcome their challenges. This can be across the board of the innovation process; from initial ideation to implementation of new technologies, thus accelerating market introduction of new products and services.

For individuals LifeLabs can offer a glimpse into the future of healthcare and wellbeing. As a member of the LifeLabs panel, citizens are able to partake in different innovation pilots to experience new products and services first hand.

In terms of learning from the Good Practice, LifeLabs is very much comparable with LiCalab.

#### Alder Hey Innovation Hub (UK):

The Acorn Cofoundry is a partnership that brings together the knowledge and expertise of the award-winning Alder Hey Innovation Hub with Nova, Liverpool's leading digital innovator, and commercial experts Deepbridge Capital. It provides clinical, start-up, and technical expertise to guide Clinical Entrepreneurs through a process to take and bring their idea to market.

The high rate of failure for digital start-ups in any sector is well documented (~90% of ideas fail), and the most common reason is building products that nobody wants. Therefore, Alder Hey Innovation Hub has developed a methodology based on LEAN Start-up principles; this means that everyone involved, from clinicians to patients, developer to designers, openly collaborate to quickly validate and solve real problems experienced in the NHS and wider healthcare system to produce high quality digital solutions with impact. This well-defined process accelerates ideas through a series of stages (activities) and gates (decisions). This helps us to manage risk and investment in a structured way. For the most promising ideas, Alder Hey Innovation Hub co-invest time, money and services with clinical entrepreneurs to accelerate and scale solutions into the broader healthcare sector, ensuring return on investment and wider impact. This approach is a first in the UK healthcare sector.

The programme is uniquely based inside a functioning hospital, with access to real problems, real people, and in real time. This enables Alder Hey Innovation Hub to place human and user experience at the heart of the programme. It has access to a broad range of people, professions, skills and talents, which unite under the programme to help drive improvement and deliver sustainable change.

A unique feature of Alder Hey Innovation Hub is its collaboration with private investors, which results in a step-by-step approach with well defined milestones. Besides the unique situation of being embedded in a hospital environment, an important learning from the good practice is that this collaboration with investors improves the innovation process.

#### Patient Innovation (Pt):

Patient Innovation is an online platform on which patients and caregivers from around the world can connect and share (or create) solutions they developed themselves or had the help from collaborators to cope with a health-related problem. The success of the Patient Innovation platform has taught us, and perhaps more importantly, reinforced the importance of end-user involvement in the development of health innovation products and services, as their opinions on what works and what doesn't should be central.

#### Summary:

The CrossCare, LiCalab and LifeLabs Good Practices originate from the 'own region' and have a mutual relationship. The successes of the CrossCare project inspire to strive for sustainable cross-border collaboration between living labs within the border region, but also beyond. As CrossCare has a limited budget, and as such was only able to honour part of the overwhelming interest shown in the project. This demonstrates a need from the corporate world for the concept offered (i.e. development in collaboration with end-users to reduce the likelihood of mismatches when a new product or service is introduced to the market).

The Alder Hey Innovation Hub is an example of a living lab approach within a hospital / clinical setting. The structured collaboration of the Innovation Hub with an investment fund acts as an accelerator of innovation. This methodology, and the composition of the partners, are instructive for our own region. Finally, Patient Innovation demonstrates an alternative (digital) approach to healthcare innovation, promoting the sharing of solutions to specific symptoms or conditions online with users from around the world. This inspiring exchange reinforces the point that healthcare is not bound to national borders.

### **Activities for the implementation of the Action**

In order to realise Action 1 – Strengthening the cross-border living lab infrastructure, the following activities, or sub-actions have been developed. Each sub-action further elaborates on the partners involved, the resources needed, and specifies the output related to the sub-action which will support the implementation of Action 1. Please note that in most instances, the sub-actions envisaged do not require funding or budgets from external sources, rather these activities will be covered by the partners involved in the framework of the activities already

#### **Q1/Q2 2019**

1. Sharing the Regional Action Plan with the Managing Authority (Province of Antwerp) as well as the Province of North-Brabant.
  - Partners involved: Brainport Development, Province of Antwerp, Province of North-Brabant
  - Resources needed:
    - Brainport Development: 16 hours, regular funding
    - Province of Antwerp: 8 hours, regular Provincial resources
    - Province of North-Brabant: 4 hours, regular Provincial resources
  - Output: approved Regional Action Plan by Provinces
  
2. Introduction of the Declaration of Intent to the Managing Authority – although the focus of the Regional Action Plan is the Interreg VA Flanders – Netherlands policy instrument, it is important to put the Declaration on the table as a relevant and complementary development which has recently taken place.
  - Partners involved: Brainport Development, Province of Antwerp
  - Resources needed:
    - Brainport Development: 16 hours, regular funding
    - Province of Antwerp: 8 hours, regular funding.
  - Output: recognition of the Declaration of Intent as input for the Interreg VA Flanders – Netherlands policy instrument by the Managing Authority.
  
3. Formulating missions to support mission driven innovation policy – missions will be formulated in collaboration with regional stakeholders during a Regional Event (number 1) on cross-border health innovation.
  - Partners involved: Brainport Development, Province of Antwerp, Province of North-Brabant
  - Resources needed:
    - Brainport Development: 16 hours, regular funding
    - Province of Brabant: 120 hours, regular funding. Additional costs for the organisation of the event will also be covered through regular Provincial funding.
    - Province of Antwerp: 16 hours, regular funding.
  - Output: white paper containing 1-3 missions which support cross-border health innovation. This document will be shared with both the Province of Antwerp as Managing Authority and the Province of North-Brabant.
  
4. Dissemination on the successes of Cross Care and interregional living lab collaborations.
  - Partners involved: LiCalab, Cooperatie Slimmer Leven 2020 (as Cross Care partners), Brainport Development.
  - Resources needed:

- LiCalab: 40 hours, project funding Cross Care
  - Cooperatie Slimmer Leven 2020: 40 hours, project funding Cross Care
  - Brainport Development: 16 hours, regular funding.
- Output: Publishing of 5 case descriptions which will demonstrate how interregional living lab collaboration has supported the SME in the development of the health innovation product or service. These cases will be further disseminated through Brainport Developments Business Programme in which business developers are in direct contact with SMEs and can promote the living lab methodology.

### Q3/Q4 2019

5. Introduction of the formulated mission to the Managing Authority – the white paper which will be produced as a result of sub-action 2 will be put forth to the Managing Authority. This will provide the basis for further discussion on the adoption of mission-driven innovation policy.
  - Partners involved: Brainport Development and the Province of Antwerp (as Managing Authority)
  - Resources needed:
    - Brainport Development: 16 hours, regular funding
    - Province of Antwerp: 8 hours, regular funding
    - MA of policy instrument: 320 hours, regular funding
  - Output: Approval of the formulated missions by the Managing Authority
  
6. Establishment of frameworks for cross-border living lab infrastructure – the framework will be formulated together with regional stakeholders during a Regional Event (number 2) on cross-border health innovation.
  - Partners involved: Brainport Development, Province of Antwerp, Province of North-Brabant
  - Resources needed:
    - Brainport Development: 10 hours, regular funding
    - Province of Brabant: 16 hours, regular funding
    - Province of Antwerp: 120 hours, regular funding. Additional costs for the organisation of the event will also be covered through regular Provincial funding.
  - Output: Formal report proposing a collaborative framework for living labs in the context of Interreg VA Flanders – Netherlands. This report will be shared with the Managing Authority.
  
7. Standardisation of methodology – in order to realise an effective cross-border collaboration, the living labs will need to align themselves in order to ensure that services offered to SMEs are standardized.
  - Partners involved: LiCalab, Cooperative Slimmer Leven 2020
  - Resources needed:
    - LiCalab: 60 hours, regular funding
    - Cooperative Slimmer Leven 2020: 60 hours, regular funding
  - Output: Blueprint for interregional cooperation activities. This blueprint will be shared with the Managing Authority.

### Q1/Q2 2020

8. Elaboration on financial instruments – these will be drafted in order to complement the ambition to increase the sustainability of a cross-border living lab infrastructure.
  - Partners involved: Brainport Development, Province of Antwerp, Province of North-Brabant
  - Resources needed:
    - Brainport Development: 40 hours, regular funding
    - Province of North-Brabant: 120 hours, regular funding
    - Province of Antwerp: 120 hours, regular funding
  - Output: white paper on recommended financial amendments which will better align the funding and the activities to be conducted under the Interreg VA Flanders – Netherlands programme.
  
9. Scaling-up interregional living lab activities – the work conducted under sub-actions 6, 7, and 8 will support the living labs in the region to more effectively support SME projects.
  - Partners involved: LiCalab, Cooperative Slimmer Leven 2020 (as living lab owners)

- Resources needed:
  - LiCalab: 320 hours, regular funding and project funding through Interreg VA Flanders – the Netherlands
  - Cooperative Slimmer Leven 2020: 320 hours, regular funding and project funding through Interreg VA Flanders – the Netherlands.
- Output: 6 cross-border living lab SME projects

### **Q3 2020**

#### 10. Continuation of scaling-up interregional living lab activities.

- Partners involved: LiCalab, Cooperative Slimmer Leven 2020
- Resources needed:
  - LiCalab: 160 hours, regular funding
  - Cooperatie Slimmer Leven 2020: 160 hours, regular funding
- Output: 3 new cross-border living lab projects funded through the policy instrument at average project budget (±700.000 EUR).