1. Background Innovation and Innovation Agenda

According the objectives of the application form, Eco4Life will finally serve as an important tool for the implementation of the EU Strategy for the Baltic Sea Region (COM 2009, 248; June 10th, 2009) and contribute significant recommendations to the flagship project of a "prosperous and healthy Baltic Sea Health Region".

To fulfill this purpose, the Eco4Life Partners and stakeholders worked closely together with the Advisory Board members, ScanBalt ExCo Memebers, and ScanBalt Health Port Members during the project´s lifespan, to contribute to the main outcome of the HealthPort Flagship project, the ISIS Innovation Agenda.

This ISIS Innovation agenda was released within Baltic Sea Region Programme project "Baltic Sea Health Region - Business acceleration support and training bridging innovative SMEs and health care organisations to strengthen BSR health economy" as Part of the Flagship Project 7.4 of the European Strategy for the Baltic Sea Region:

Innovation has become one of the most powerful levers for smart and sustainable growth. Regions around the globe have recognized the potential of developing innovation and entrepreneurship clusters and their contribution to regional development and economical growth. The transmission of information and innovation in horizontal and vertical relationships is one important success factor for cluster development. The Baltic Sea Region is Europe´s leading macroregion and has since long been attributed high competitiveness with respect to economic development and power of innovativeness. According to the last "State of the Baltic Sea Region Report" [Ketels, 2011] the BSR has managed through the crisis better than most of the comparable macroregions on the globe. It´s economies proved to be flexible, and governments effective in implementing robust measures to support economic growth. However to uptain the stable and good development further efforts are needed: Ketels regards regional collaboration as a critical tool for competitiveness upgrading, especially in areas like market and innovation system integration. He further demands joint policy learning together with traditional support measures to lagging countries. It will be important to foster Entrepreneurship through indigenous innovation support - a "smart industrialisation strategy" will be critical for the less developed parts of the Baltic Sea Region to accelerate catch-up as well as for its already wealthy economies to sustain their strong global position.

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The Goal of the Innovation Agenda is

- Increase development and implementation of innovative products, technologies or services for health and life sciences
- Accelerate market access for innovative products, technologies or services
- Set up the framework for a sustainable innovation ecosystem in the BSHR
- Through innovation promote more efficient BSHR health care systems
- Spur macro-regional development

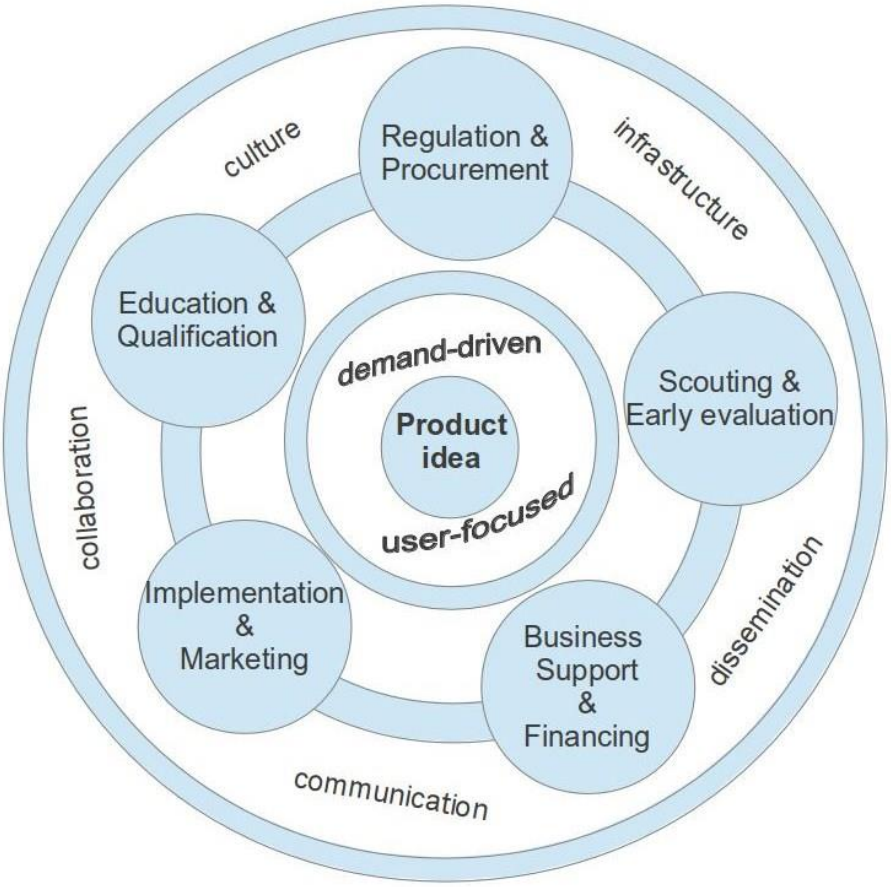
The Key messages are targeted for a common Innovation Ecosystem that will

- boost the regional economies, contribute to more effective and qualitative health care and tackle the grand challenges of health care in an ageing society
- contribute to a BSR-wide common home market for health economy and related sectors
- overcome fragmentation and serve as a catalyser for implementing common regulation and public procurement rules
- foster a common identity in a transnational context
- help to overcome innovation traps like lack of early stage access to capital or hurdles within the systems of procurement and regulation
- provide a creative and save environment for cross-pollination of ideas and innovativeness

2. ScanBalt IBIS - International Business Innovation Support

The IBIS: International Business Innovation Support was developed with the input and collaboration of the Eco4Life Project, with ScanBalt as associated partner.

It was identified a number of barriers that hinder the successful transformation of ideas into products, like e.g. lack of entrepreneurial skills of stakeholders involved, long delays from research to market due to complex regulatory environment, lack of access to venture or any other type of early stage capital.



Source: HeathPort Flagship “IBIS Innovation Agenda”

To overcome these obstacles and to spur macro-regional development in the Baltic Sea Region for Life Sciences and health a framework for a sustainable innovation ecosystem is proposed to be installed: ScanBalt International Business Innovation Support IBIS. IBIS is a multidimensional approach and an instrument for macro-regional development. It implements the EU innovation strategies and may be considered as an implementation guideline providing a blueprint for the concrete realization.
Realization tools are proposed by the Eco$life Project below.

3. Eco4Life Implementation Tools for ISIS Innovation

a. Scouting & early evaluation

From an ecosystems perspective not every invention contributes to the final objective to create smart, sustainable and inclusive solutions that generate improved health outcomes. Systematic innovation management is needed starting with early idea evaluation to filter out the most promising ideas. Methods to accomplish this have been tested and comprise ideas competitions, interdisciplinary expert teams, the use of innovation coaches or dedicated Innovation management platforms. Experience and methodologies form the field of Health Technology Assesment (HTA) could also provide a valuable contribution for evaluating proposed solutions in an early stage.

Implementation tools of the Eco4Life project:
Recommendation for ideas competition

The concept of "ideas competitions" approved by an interdisciplinary expert team was applied in the project lifespan: at the 2nd International project conference (2011, ScanBalt Forum), together with Innovation, Finnland, a competition of idead between solution in the medical device- and service sector were elected, awarded and attended until a certain point in the transfer of the idea.´

b. Business Support & Financing

Financing in an early stage to validate an idea is a major barrier for innovative ideas. New mechanisms of financing like crowd funding or a BSR fund for life sciences and health should be developed targeted specifically at early stage funding. Diversified financing measures are necessary to overcome the financing gap that is currently one of the biggest barriers to transform innovative ideas into successful products or services. Due to the small home market for many BSR countries internationalisation is a must. SMEs need support to be successful on international markets. This could be done through international mentoring.

Implementation tools of the Eco4Life project:
Recommendation for crowd funding (South) Baltic platforms

New financing tools of crowd funding were discussed and developed for the South Baltic Context starting from the 1. Baltic Sea Health Region Meeting, 2011, where Eco4Life participated (International Part of the Annual National Conference on Health Economy in Rostock, Warnemünde).
For the crowd funding aspect, stakeholders from Germany and Poland were contacted, and a workshop agenda developed, which will be part of the 2015 6th Baltic Sea Health Region Meeting, organized by BioCon Valley in spring 2015.

c. Implementation & Marketing

To bring a product from idea to market requires a lot of different skills. Most of these skills (knowledge in regulation & certification, marketing & sales etc.) are not necessarily available in an SME or are not part of the competence that health care professionals have. The common innovation ecosystem should therefore offer services to these stakeholders that complement their competence and provide the missing skills. This requires new forms of collaboration and business models.

Implementation tools of the Eco4Life project:
Recommendation for cluster aggregation/development of cluster services

For the main areas of business and cooperation, networks were setup within the Eco4Life project lifespan.

- South Baltic Diabetes Network
- South Baltic Green HealthCare Network
- South Baltic BioMaterial and Medical Device Network
- South Baltic BioEconomy Network
- South Baltic Clinical Trial Network

These networks are planned to a “nucleus”, to become later regional cross-border cluster: A well-developed concentration of related business spurs three important activities: increased productivity (through specialized inputs, access to information, synergies, and access to public goods, collaboration and communication), more rapid innovation (through cooperative research and competitive striving), and new business formation (filling in niches and expanding the boundaries of the cluster map).

d. Education & Qualification

Clinical personal, researchers and also SMEs often lack the knowledge about entrepreneurship and business skills. Education and Qualification are of utmost importance to build capacity in the region and to retain talented personnel. A modular virtual course focused on entrepreneurship in life sciences and health combined with regional mentoring has already been proposed by the ScanBalt Campus project. The ScanBalt Educational platform as developed in the scope of the HealthPort Flagship project provides an excellent opportunity to provide education and qualification in a macro-regional setting.

Implementation tools of the Eco4Life project:
Recommendation for further entrepreneur and business skill curriculum development

The curricula or the Diabetes Summer School developed within the Eco4Life project, are a module of the ScanBalt Campus project.
They combine both scientific and medical expertise and business skills, as some units are trained on special medical devices to support their market implementation.
The curricula are planned to be carried out by experts from the Mecklenburg-Vorpommern, West-Pomeranian and Klaipeda region.

Additionally, the curriculum of training units developed within Eco4Life, serve as template for similar future qualification moduls of the ScanBalt Educational platform, providing knowledge about entrepreneurship and business skills:

- General fund application (LT)
- Specialized introduction into DIN-ISO certification of sustainable healthcare units (PL)
- Introduction to FDA-Application for medical devices (GE)

e. Regulation & Procurement

Regulation and Certification is another important field to address in an ecosystems approach. Clinical trials and verification are mandatory to prove efficacy and safety of drugs, medical interventions and devices, diagnostics and e-health applications. Due to complex regulatory, organizational and experience requirements, demanding a disproportionate operational and financial effort, many SMEs, start-ups or investigators often cannot affort clinical research to the necessarily extent. Thus, turning the clinical trial and verification topic into the most relevant bottleneck in medical technology transfer and dampening innovation. The need for a common approach of this innovation inhibitor was already recognized in particular regions of

the Baltic Sea Area: NordForsk, an organization under the Nordic Council of Ministers and providing funding for Nordic research cooperation, kicked-off the Nordic Trial Alliance in 2013, to come up with joint solutions for NO, SE, DK, FI, IS. In Northern Germany, a strategic approach to overcome the obstacle for medical technology transfer was drawn by the master plan Health Economy 2020 on behalf of the federal government Mecklenburg-Vorpommern:

Implementation tools of the Eco4Life project:
Recommendation for further development of cross-border clinical trial approach

An incubator for clinical trials is intended to bundle resources from this region and the adjoining Polish Baltic Sea region, developing a business model for a South Baltic ClinTrial Service Cluster.
A set of modules/Standardized procedures for clinical trials on personalized medicine was generated by the trainee exchange within Eco4Life.

Eco4Life Contact Point Greifswald, December 2013