



A NORDIC-BALTIC RESEARCH AND INNOVATION  
PROGRAMME ON LIVING LABS

Programme Description

29 November 2009

## 1. Introduction and definition

### 1.1 Appearance of Living Labs

During the most recent years the field of User Driven Innovation (UDI) has intensified to include users in the creation and development process. It has thereby become an area for research and development and a strategically chosen area in many countries, specifically in the EU.

This intensified involvement of the users was primarily centred on Information and communication technologies (ICT) applications. In 2004, the Information Society Technologies Advisory Group (ISTAG) committee proposed Experience and Application Research (EAR) as a means of addressing the challenges of creating a human-centred approach to Research and Innovation (R&I) in ICT Ambient Intelligence for supporting integrated research and concurrent assessment of Ambient Intelligence technologies and systems. The EAR involves research, development and design, *by, with and for* users, and should thus enable prototyping of novel interaction concepts while resembling natural environments of use.

As a result of this awareness several research projects have implemented a User-centred Research approach and method, entitled either 'Experience and Application Research' or 'Living Lab', in order to involve users as early as possible in the different stages of R&I and innovation processes.

### 1.3 State-of-the-art

In an Experience and Application Research (EAR) or a Living Lab approach, users are engaged into User Experience Prototyping Environments where scientists from multiple disciplines are expected to reach a higher level of understanding of occurring phenomena on the one hand, and to create new concepts that will lead to radical innovations in terms of both products and/or services on the other hand.

The success of using Living Lab as a method has widened the areas of application significantly. In the “third wave” call of European Network of Living Labs (ENoLL)<sup>1</sup> in November 2008, more than 80 members passed a strict process and joined the network. The 129 approved Living Labs within the ENoLL cover a wide variety of topics and represent a global network by including members outside EU such as Norway, Mozambique, and Brazil as well.

Looking at the geographical spread of the present ENoLL members within the Nordic Baltic region; Finland has been very active since the beginning of ENoLL and has 14 members of ENoLL. Sweden has 7, Norway 2 and Denmark 1. The ENoLL has been a grass root movement and shows the development from a bottom up perspective. On a policy level, the European Commission has given priority to Living Labs activities in the Framework programme. Sweden has launched a national programme to fund Living Labs. There are a number of high level ongoing discussions in the Nordic Baltic region where Living Labs plays specific role.

Fact box: Definition, mission, key components, impacts and benefits of Living Labs

#### Definition of a Living Lab

- There are several diverging definitions of Living Labs. In this programme it is defined as a forum for research and innovation applied for development of new products, services and processes. It employs working methods to integrate people as users and co-creators throughout the development process and recognises the needs of users and working conditions of service providers, both in their actual contexts. For service development the term ‘user’ includes also practising service providers.

#### The mission

- Empower users as innovators through participation in an open and user-driven innovation and design process
- Build up cross-border networks in Nordic-Baltic region for globally scalable innovations
- Increase the competitiveness of the region and improve people’s quality of life

#### Key components

- User involvement (*central focus*) – active, voluntary user participation throughout the development process
- A common focal area – a clear strategic idea under which partner organisations can come together and which frames the content and prioritized topic(s) of the Living Lab
- Structured working method (*key to success*) - method and model for integrating users throughout the development process
- Organisational structure (*essential criterion*) – a cohesive force that is rooted in closeness and solidarity in a Triple Helix collaboration that also exists between parties throughout the development value chain
- Technical platform (*enabler*) – flexible and tailored to stimulate the development processes. ICT involved method and tool for the innovation process seen as one kind of enabler

#### Impacts and benefits

- The integration of users into the entire development process ensures reliable market evaluation and supports the development of products and services demanded by users themselves
- SME, micro-organizations and start-ups can share resources without much venture capital

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<sup>1</sup> <http://www.openlivinglabs.eu/>

## 2. Background and motivation

It is well known that the Nordic countries have been a place for many global companies to test and evaluate their products and services, because Nordic citizens are eager to try new products and services, are early adopters and quick to start and follow trends. The Baltic countries have been following (and partly surpassing) the Nordic countries in this matter. Vital for user-driven research, innovation and development processes is to access and share ideas, experiences and knowledge. This should be done in relation to demands and daily needs for products and services. Living Labs as a new method and driving force will meet the needs and eventually stimulate user-driven research and innovation.

The project work developing “Nordic-Baltic Living Labs - the creation of a Nordic-Baltic programme” has been financed by NordForsk under the *NORIA-net programme*. The project, coordinated and led by VINNOVA, started in 2007, and Nordic and Baltic countries have participated in developing the programme. During the project the participants adopted the acronym LILAN (Living Lab in the North) for the continuation of the project. See appendix 1 for more information about the project partners.

The motivation behind such a joint initiative in the Nordic-Baltic region aims to offer:

- Opportunities to make a cross-border network of Living Labs for the region, connecting people, collaboration partners and markets
- Opportunities for organisations with similar ambitions to learn from each other (share experiences, good/bad practice and methods)
- Operating with larger resources, which implies possibilities for a wider spectrum of topics, a wider market via networks of other Living Lab and access to a larger group of users
- Opportunities to cooperate with a wider range of organisations and specialists
- Enhanced strength, which will increase the ability to compete with other initiatives
- Increased possibilities to influence the development of Living Labs concept, to encourage Living Lab activities in the region, and to strengthen the regional development at an international arena

## 3. Direction and target group

### 3.1 Programme direction

**Strong R&I environments.** The LILAN programme will support projects that are characterized by research and innovation and effective interaction between businesses, the public sector and research institutions. The purpose of the funded projects is to establish environments and working methods which increase the competitiveness of organizations and enhance the user as an innovator.

**Building knowledge and experience.** The applications have to be theoretically and methodologically reflective and serve to create and practise qualitative and, where of particular relevance, quantitative methods. First, LILAN is seeking applications in which the convergence of management and facilitation and creative processes are given prominence. Second, the desired participation of diverse target groups and stakeholders from private and public sectors will conduct more interactive methodologies.

In relation to this a wide area of research challenges can be mentioned, for example:

- Who are the users that should be involved in open innovation processes? What are their characteristics, in which roles should they be involved, why should they be involved (effect logics), with what purpose?
- What are the social, economical and technical mechanisms that need to be developed in order to secure scalability of relevant project findings?
- Organizing for Innovation, Continuity, Openness, Realism, Empowerment of Users, and Spontaneity/Sustainability and Modern Business Models
- Virtual contexts (spaces), Physical contexts (places), everyday contexts, users contexts and how can innovation be implemented in these contexts

- For further details see Appendix 2.

**Include users.** A LILAN project should shed light on both barriers and potentials arising when including users in the many ways in which this can be achieved.

**Profitable outcome.** The projects should also in the long term contribute to increasing growth in the participating companies and increased user contentedness and/or increased efficiency in participating public institutions. A LILAN project could result in a running Living Lab actively used in the development of new products, services, and concepts. Finally, a LILAN project should increase the qualifications of employees to take part in the user-driven innovation processes in the participating companies and public institutions.

**Focal areas.** This Programme Description does not state certain prioritised areas. In the Nordic Baltic region there are several important areas and strongholds for cross border collaboration. For example the BSR Inno-net identifies the following “new areas”: Health and well-being, tourism and transport, Food & life science/biotech (functional food); and Energy/environment plus power generation/transmission. A LILAN project should provide input on instilling knowledge as to how Living Labs can be practised either within a key sector or in a way that will be relevant for a wide range of businesses. It is also important for the projects to take into account the great need in both the private and public sectors for knowledge about Living Labs – practical and/or “state-of-the-art” in the field and new and research-generated knowledge. For organisations in both sectors, participation in research projects can be a highly positive and relevant means of gaining insights into the status and knowledge of research in the field, which will serve to build capacity to further develop or establish own practices in the field.

### 3.2 Objectives

The programme aims to

- 1) Stimulate cross-Nordic-Baltic cooperation in Living Labs research & innovation by bringing together prominent research and practitioner groups in the Nordic and the Baltic countries (Latvia and Lithuania currently);
- 2) Increase Nordic & Baltic international competitiveness through Living Labs’ support for creativity and productivity - leveraging Nordic-Baltic multi-cultural, multi-disciplinary and multi-thematic strengths and assets;
- 3) Meet a need of more research on the Living Lab approach to increase the collected knowledge about this concept, and strengthen and increase the quality of research at the Nordic, European and international levels;
- 4) Encourage the cooperation between research, industry, and public sectors by development of Living Labs cross organisations, sectors and countries.

### 3.3 Target group

The LILAN programme is aimed at legal entities that are the driving force at the centre of a strong research and innovation environment. These environments are characterised by a high level of knowledge, innovation and effective collaboration between business, the public sector, academic/research institutes and users.

Existing Living Labs coordinated by the member of LILAN participating countries can apply for funding to expand their cooperation with other Living Labs.

### 3.4 Project requirements

The programme will fund, promote and support user-driven research and innovation evolving from multiple dimensions and disciplines in any theme and sector. Applications must be written in concordance with key components given in the FactBox in Section 1.

Projects must include, facilitate or examine any kind of Living Labs with focus on either research or practical issues. This could include, among other things, development and testing of new methods and tools, building competencies, training, networking, or knowledge transfer and information dissemination.

Registered research institutions and organisations including business companies in one of the Nordic and the Baltic countries are eligible to apply for support. In addition, all applications must include participants from a minimum three of the funding countries.

Applicants outside the LILAN countries or outside the Nordic and the Baltic countries can also participate at their own cost. The coordinating institution and the majority of the project consortium, the contract owner and project coordinator, must be officially registered in one of the LILAN countries.

#### **4. Expected impact and effects**

In the long run the projects funded through this call should improve the conditions of people's everyday life and contribute to sustainable growth and to strengthen the competitiveness of the Nordic-Baltic region in a global world.

##### **Expected long term effect on a Nordic-Baltic regional level with possibilities for scalability, i.e., impact:**

- Stimulate quality of life and sustainability – including environmental, societal and economical growth.
- Strengthen the attractiveness and competitiveness of the Nordic-Baltic region.
- Strengthen the innovation system.
- Strengthen the research in living labs and user-driven innovation in the Nordic-Baltic region.

##### **Expected short term effect from the projects of this call:**

- Increase product success rate and turnover of companies involved in funded Living Labs activities.
- Increase attention on and attractiveness of partners involved in Living Labs. Also increase attention given to the work and the products and services related to the funded initiatives.
- Create Nordic-Baltic cross-border structure on resources, knowledge and experience on how to successfully run transnational user-driven projects.
- Create new tools, methods and processes for active user centric contexts. Imply a higher degree of user involvement in the innovation process.
- Create new products and services that are highly appreciated, and used by (people) the users
- Increase state of the art knowledge on the Living Labs concept, and improve research methodologies in the field of user centered development.