



02.04.2007

**Call for Proposal –
Pilot initiative Living Labs**

**Living IT laboratories for extended user
involvement in innovation processes**

1. Invitation

VINNOVA hereby invites applicants to submit proposals in respect of the financing of projects under the “*Living Labs – Living IT laboratories for extended user involvement in innovation processes*” umbrella. The core theme of these projects will be the use of IT. Proposals are welcomed from companies, organisations, public sector bodies, universities, technology colleges or research institutes that are the driving force at the centre of an environment characterised by innovation and effective interaction between business, the public sector and academia/research institutes.

The purpose of this call for proposal (CfP) is to establish environments and working methods that improve the ability of companies and organisations, in collaboration with users, to develop competitive IT-based products and services.

The subject area for this CfP is product and service development, based on IT, that is both driven by and executed in collaboration with *users*.

VINNOVA’s objective is to contribute towards achieving sustainable growth in Sweden by financing needs-driven research and the development of effective innovation systems. By using analyses that identify obstacles and opportunities in these systems, focus areas can be developed that have growth potential for both needs-driven research and various forms of player interaction. This call for proposal is one such focus area.

The field in which VINNOVA operates, where research, innovation and renewal are core elements, presents a challenge for all involved. It’s about daring to adopt new approaches and sometimes taking risks by investing in new areas and research groups in order to achieve long-term renewal. It’s also about daring to break through barriers, both in terms of choice of collaboration partner and between different areas.

Each CfP has an objective, both short-term and long-term, in respect of what can be achieved and sets out how each project funded contributes towards sustainable growth. These objectives are under continuous review.

In the case of this CfP, a maximum budget of **SEK 11 million** has been set for the period 2007-2009.

An information day will be held in Stockholm on 24 April 2007. Further details are available from the VINNOVA website.

The closing date for applications has provisionally been set as 29 May 2007. Please note, all applications must be received no later than 14.00 CET.

Details about this CfP, as well as the qualifying criteria and the terms and conditions for participation are set out in the documentation accompanying this invitation. This material is also available from the call for proposal page on the VINNOVA website (www.VINNOVA.se). This page also contains up-to-date deadline information and provides a link to the online application function.

Stockholm, 4 April 2007

Per Eriksson
Director General

Alexander Nilsson
Programme Manager

2. Target group and purpose

The CfP is aimed at companies, organisations, public sector bodies, universities, technical colleges or research institutes 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. The activity in which the applicant is engaged must be mature and structured in line with the Living Labs definition set out in Section 3 below.

VINNOVA's grant is intended to provide support for establishing and developing *activity* in a research and innovation environment in accordance with the Living Labs concept (see definition on page 5). The activity must continue after the VINNOVA grant has run out. For the applicant, therefore, this is not a matter of being a limited project with a beginning and end. However, the funding provided by VINNOVA within the framework of this CfP will be limited to a maximum of 24 months during the period 2007-2009.

The purpose of this VINNOVA initiative is to improve the ability of Swedish companies and organisations to collaborate with users to produce competitive IT-based products and services. The CfP is intended to strengthen initiative-rich research and innovation environments and, as a result, the companies and organisations that are actively involved in these environments. Funding will be targeted at two areas. The first is developing structures (working methods/knowledge) and methods where users are involved throughout the entire development process of the product or service in question. The second area is the development of forms of collaboration between players, which includes disseminating knowledge in respect of user involvement. In addition, the advantages and disadvantages of the Living Labs concept will also be scrutinised and evaluated.

This CfP is also intended to make Sweden more competitive on the international stage in and around the sphere of user-driven development, increase the value of Swedish know-how and Swedish players on international markets and to broaden Swedish participation in EU framework programmes.

3. Background, reasons and definition

This CfP is an initiative from VINNOVA focusing on IT use. VINNOVA's IT use initiatives aim to stimulate growth in sectors of the Swedish economy where the use of IT is prevalent. This is done by both extending the development of existing companies and public sector bodies and providing the funding to assist new start-up operations. By financing innovation, research, development and demonstration projects in which users play an active part in ensuring that project outcomes increase the benefit of IT use to society and organisations, it is possible to increase the chances that IT and IT-based services will be designed *for* users and that such services will be worth using.

The onset of individualisation, increased competition and short product/service development cycles means that knowing users and their needs becomes ever more important. The potential for successful IT-based services is enormous. However, exploitation of the opportunities that technical systems and digital infrastructures offer is still in its infancy¹. A significant proportion of all launches of new IT-based products and services fail, with some sources indicating that this figure is as much as 90 %.² One of the main reasons for this is that the products and services offered do not satisfy user requirements. VINNOVA believes that it is strategically important to strengthen methods in innovation processes that are user-driven. As

¹ From an IT policy for society to a policy for the information society, Government Bill, 2004/05:175

² Gartner (2006), Jonas Matthing, Customer Involvement in New Service Development (2004)

part of this, VINNOVA is seeking to exploit and establish the Living Labs concept in Sweden to a greater extent than ever before³.

The Living Labs concept⁴ was created as a research method for experiencing, creating, validating and developing prototypes and complex solutions in a varied and constantly changing world. The concept, which is still under development, has in recent years attracted increasing international attention. It has been highlighted by the EU Commission as a prioritised area within two directorates. Its development has been strengthened by a number of theories, including “User-driven innovation”⁵.

Scandinavia has an established tradition of usability and participatory design, which has been fostered by engaging in an expedient expansion of IT infrastructure and having a high proportion of active users. Now that the Living Labs concept is to be adapted for the development of IT-based products and services, VINNOVA regards it as being very important for Sweden. The potential for strengthening the Swedish market for developing and launching user-driven products and services based on IT is good. VINNOVA wants to support these initiatives and make those coming from Swedish companies/organisations more visible.

As the Living Labs concept is undergoing a process of development, VINNOVA is searching for an appropriate doctrine and wants to investigate which forms of Living Labs are most beneficial and establish how the authority can design initiatives that are similar to this CfP. It is therefore the CfP has been classified as a “pilot initiative”.

3.1 Description of the Living Labs concept

Basing product and service development on user requirements is a significant challenge (both practically and in terms of the methodology used). A series of established methods already exist (design, usability, lead-user, testing), although none of these have yet been adapted to fit the Living Labs concept. They differ in the reason why users are involved, which users are involved and the way users are involved. The choice of method depends on the situation, the problem to be tackled and the size of workforce in the research and innovation environment. It is important that each Living Lab clearly delimits its efforts, specifies its problem scenario and adapts its activities according to the selected methodology.

VINNOVA regards a Living Lab as being an arena for innovation that has its starting point in an activity linked to a group of players comprising innovative companies and organisations that together create an effective innovation system for user-driven IT development. Experience and research shows that geographical proximity and closeness creates competitive advantages in respect of interaction, learning, access to expertise and development and commercial collaboration. Regions and environments that have an insight into these issues, as well as a capacity for renewal are able to develop their competitive advantages with a laser sharp focus. Increased growth and an ability to compete on the international stage in a variety of environments contribute to the growth of the country as a whole. A Living Lab must be firmly grounded in, and receive strong support from, the people in its surroundings. At the same time, it is important that the operation confines itself to its sphere of operations, to other Swedish activities and to international development. It must be able to satisfy the interests of various different

³ A more detailed picture can be found in “State of the art”, M Eriksson (2005), available from the CfP page on the VINNOVA website.

⁴ William J. Mitchell, Professor of Architecture and Media Arts and Sciences at MIT

⁵ Eric von Hippel, Professor of Management of Innovation and Entrepreneurship at MIT

players and have a sound long term future. This imposes stringent demands on the expertise and abilities of the operation's management team.

Definition of Living Labs

A Living Lab must be seen as an arena for innovation. It employs working methods to include end-users throughout the development process and recognises the needs of users in their actual contexts and day to day activities.

The core criteria are:

- 🕒 **User** (*central focus*) – active, voluntary user involvement throughout the development process
- 🕒 **Structured working method** (*key to success*) - method and model for including users throughout the innovation 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 the innovation processes to be stimulated

Clarification of the fundamental criteria in accordance with VINNOVA's definition of Living Labs:

User

- Users are those who will *actually* use a product or service.
- The concept embraces individuals, citizens, users, consumers and companies/organisations.
- Users are not just the starting point for the operations of a Living Lab, they also constitute an important element that must be managed as the key resources they are.
- Users involved must be shown to be relevant to the activity pursued. The size of the user group can be measured in the number of active, relevant people included.

Structured working method

Living Labs must employ scientific knowledge and expertise in work

- involving users in development activities based on their own normal environments (i.e. do not invite users into an artificial laboratory environment)
- using methods to involve users at every step of the development process, even during the initial phases (e.g. needs analysis and skills development), i.e. not using users solely to evaluate or verify products and services that have already been developed.
- using appropriate methods that take into account various parts of the product or service development, forms of collaboration between players and players' interests.
- structuring training (i.e. developing methods suitable for use within Living Labs) and methodology (in contrast to unstructured "trial-and-error").
- having clear forms of collaboration between involved parties, e.g. in respect of business models, and a definition of how various parties can participate in and draw benefit from the structure and activity around Living Labs.

Organisational structure

- A Living Labs environment is to be viewed as a small, developed innovation system that, according to VINNOVA, shall encompass active collaboration between players in business, research and the public sector. Living Labs should be based on collaboration, be supported by bodies with a significant role to play in their activities and have clearly articulated long-term objectives.
- The operation must be based on a sound strategic concept that permeates the environment and fronted by suitable representatives. In addition, the operation should exhibit good growth potential and take its starting point from special qualities or other particularly good criteria.
- Players from the entire value chain (from concept/requirement to supplied product/service) in the development should be on board, along with active parties linked to the Living Labs environment.

Technical platform

- The technical platform for a Living Labs environment works as both a criterion and an enabler (not as a limiting factor). The technology may comprise an established infrastructure or be of a more temporary nature and adaptable according to the development intentions of the lab. However, this CfP does not include support for technical development and infrastructure.

4. Focus of the CfP

Through this CfP, VINNOVA intends to make forms for user-driven development and innovation more robust and to support the expansion of arenas for working methods defined herein as Living Labs.

This CfP is a *pilot initiative*, which will clarify how VINNOVA can best channel future investment in the part of the innovation system that encompasses the concepts of Living Labs and user-driven development.

The CfP contains two offerings. Applicants may choose to submit applications for one or both. To apply for both offerings, two separate applications must be submitted.

Set-up support

VINNOVA anticipates awarding grants to at least 6 projects, each with a running time of up to 2 years.

The grant is aimed at players who have reached a certain level of maturity in their operations in accordance with the definition of Living Labs and its clarification as set out in Section 3. The starting point will be making the weaknesses of these operations more robust in relation to the definition of Living Labs and its clarification. VINNOVA intends allocating qualifying projects limited support that will enable them to establish themselves as a Living Lab.

- It is expected that certain criteria as set out in the Living Labs definition description will already be in place in order to enable qualitative operations to commence as soon as possible.
- Once the project period has come to an end, the Living Labs environment should be able to drive operations more efficiently.
- In order to strengthen knowledge development, projects awarded grants will be given access to a forum where participants can share experiences. The forum will also feature a training element. In addition project subsidies, VINNOVA will also pay for the travelling costs of key personnel to attend forum meetings.

Commissioning and administration of a Swedish network of Living Labs environments

VINNOVA anticipates awarding a grant to 1 project with a running time of no more than 2 years.

The grant is aimed at a Living Labs environment run by an individual or team that, in the main, falls in line with VINNOVA's definition of Living Labs. Applicants must be able to assume the role of national coordinator. The purpose of the grant is to enable the successful applicant, in *consultation* with VINNOVA, to encourage experience exchange between Living Labs, to identify forms for collaboration between Living Labs (including sharing resources such as company contacts, users, technical set-ups on an operative level) and to raise the visibility of various ongoing Swedish initiatives that are of interest to Living Labs. In addition, the chosen project must also help create better criteria for all Swedish Living Labs to be involved in international initiatives.

No funds in this CfP are intended to be used in the expansion of technical infrastructure. Grant awards are to provide support for human resources and sub-projects aimed at testing and validating the strategic concept of a Living Lab (a 'proof-of-concept project').

5. Effect objectives

VINNOVA regards the financing of needs-driven R&D as investments that, in the long run, will promote sustainable growth in Sweden. The effect objectives of this CfP specify what VINNOVA expects projects that are awarded grants shall contribute to this end.

Long-term effect objectives

- to ensure that Swedish suppliers are able to provide more competitive and less risky products and services through active user involvement in accordance with the Living Labs concept
- to develop effective processes that both ensure levels of quality and reduce the development time from drawing board to market
- to enable Sweden to become a leading, internationally renowned environment for successful, user-driven IT development

Short-term effect objectives

- to increase Swedish presence on the international stage by strengthening the Living Labs concept in Sweden, including augmenting Swedish involvement in EU framework programmes
- to create forms for effective collaboration, experience exchange and resource sharing between Living Labs environments in Sweden
- to demonstrate, in practical terms, how user-driven development can play a part in product and service development, including extending knowledge concerning user requirements
- to generate new knowledge, new tools and methods that facilitate user involvement in the innovation process
- to create a common approach amongst Swedish players towards the Living Labs concept

6. Project and applicant requirements

The following requirements must be satisfied in order to ensure that the application receives VINNOVA consideration:

- The project must be in line with the focus of the CFP and clearly contribute towards satisfying its objectives.
- Project content must fall within the parameters of IT-based product and service development that that is both driven by and executed in collaboration with *users*.
- Applicants must confine their Living Labs environment to the definition of a Living Lab (with clarification) given in the CFP and describe its strengths and weaknesses. In addition, applicants must also provide a clear definition of their role in an effective innovation system.
- The project must be implemented in active collaboration between players in business, research and the public sector.
- The project must be headed by a project lead or team with appropriate experience and the qualities to drive the processes required to develop robust research and innovation environments.
- The project must demonstrate the variety of ways in which the skills and commitment of both men and women are to be utilised in the work carried out.
- The project is to run for no more than 24 months during the period 2007-2009.
- At least 50% of the total cost of the project should be financed by funds other than the VINNOVA grant. In spite of this, VINNOVA may approve projects in receipt of a lower level of outside financing if there are special grounds for doing so. Note that applicants (particularly companies) must adhere to the ordinances in force concerning State support⁶.

Outside financing may be in the form of cash funds, but it may also either partly or wholly consist of labour provided by the applicant or other payments in kind. The value of labour provided by the applicant is to be calculated at a standard rate of SEK 600 per hour (for more information, see VINNOVA's general advice on approved costs⁷).

7. Assessment criteria

The assessment will be conducted based on the requirements specified above and the content of the project description in accordance with recommendations set out in Section 12. Special emphasis will be placed on:

- the application's description of how the project can be established as a robust environment
- how the funding applied for can overcome weaknesses and draw benefit from strengths in relation to the definition of Living Labs

⁶ EU regulation (1995:1254) on State support for technical research, industrial development work and invention activities (<http://www.notisum.se/rnp/sls/lag/19951254.htm>)

⁷ Swedish Governmental Agency for Innovation Systems (VINNOVA) general advice concerning approved costs and approved financing in issues relating to grants (http://www.vinnova.se/upload/dokument/Finansiering/Godkanda_kostnader_061130.pdf)

- a detailed project plan (time, budget and activities), including a description of planned activity once the project period has come to an end.

The following criteria will determine VINNOVA's decision concerning the financing of project applications:

1. **Relevance:** How much is the project in line with the focus of the CFP and how does it contribute to its purpose and effect objectives? What is the supporting capacity and growth potential of the strategic concept?
2. **Quality:** What are the specific qualities and fundamental criteria of the project? To what extent can the project contribution towards product and service development, based on IT, that that is both driven by and executed in collaboration with *users*? How do these two issues relate to the definition of Living Labs (with clarification), i.e. in respect of:
 - a) users
 - b) structured working method
 - c) organisational structure
 - d) technical platform
3. **Implementation:** The applicant's (project team's) ability and credibility in respect of the implementation of the proposed project. This includes an assessment of the team in terms of skill, gender and diversity aspects, and an assessment of collaboration and approach, including a determination of whether the project plan and project budget are realistic.

Several factors will demonstrate the clarity and extent to which the project plan can be implemented, as well as participants' ability to carry out the project:

- a) Has the project been credibly described based on project objectives, plans, milestones, allocation of responsibility, budget, continuation and anticipated results?
 - b) Based on the project plan described, can awarded funds overcome identified weaknesses?
 - c) Is the composition of the project (researchers, companies, organisations, users) good enough to achieve the project's results?
 - d) Will the skills and commitment of both men and women be utilised?
 - e) Are partner companies/organisations actively committed to the project and have they expressed a willingness to be part of the work, to exchange experiences and to strengthen the forms for user-driven development?
 - f) Has the project lead or the team the confidence, knowledge and skills necessary to successfully implement the project in conjunction with other participants and achieve a good result?
4. **Exploitability/utilisation:** The applying consortium's willingness and ability to disseminate and utilise the promised project result for societal and/or commercial

benefit. This includes consortium plans and undertakings to disseminate and utilise the project results and how well the project is linked to the internal strategy, innovation and development processes of the applying organisations.

- a) To what extent will the project be able to create knowledge and deliver results that companies/organisations/academia or other Living Labs will be able to draw benefit from?
- b) What is the potential of the project to deliver results, position itself and be active in an international arena?
- c) Will the project be able to deliver creative and valuable results that are unique and competitive?

The assessment is a total appraisal of the points set out above. These criteria will also be applied in follow-ups and future evaluations of the project.

The aforementioned CfP is a pilot initiative. Consequently, VINNOVA intends to prioritise various categories of project; initiatives both large and small, as well as both more and less established environments. The aim is to show how VINNOVA should focus in the future of the part of the innovation system encompassing Living Labs and user-driven development of IT services and IT-based products.

8. Budget

This CfP has a budget of up to SEK 11 million for the period 2007 – 2009. Within this framework it will be possible to award grants to at least 7 projects (6 set-up support, 1 support for a Swedish network).

9. Schedule

The following provisional dates/times apply for the CfP. For up-to-date information about dates/times, see the CfP page on the VINNOVA website (www.VINNOVA.se).

Information day: 24.04.2007

Closing date for applications: 29.05.2007. Application to be sent electronically no later than 14.00 CET

Provisional closing date for financing decision: 30.06.2007

Earliest project start date: 15.08.2007

Final project completion date: 30.09.2009

10. Evaluation process

Applications will be evaluated by VINNOVA with the help of a team of advisors assembled from the worlds of research and business, as well as the wider community, all of whom has specialist expertise in the area of IT use. If necessary, applicants will be called for interview to answer questions and to justify their application in more detail. VINNOVA will then make a formal decision and notify all applicants.

VINNOVA is subject to the principle of public access to official records. However, the authority is obliged to protect matters such as corporate secrets in accordance with the provisions of the Swedish Secrecy Act.

11. How to apply

Applications may only be submitted electronically using the application service on VINNOVA's eServices portal. This can be reached via the call for proposal page on the VINNOVA website under the heading "How to complete an application/outline".

To submit an application, you must first create a VINNOVA user account. This will then enable you to log into the application service. If you have an existing VINNOVA user account, you can use this instead.

The closing date for applications has provisionally been set as 29 May 2008. Please note, all applications must reach VINNOVA no later than 14.00 CET on this date.

If you have any questions regarding the electronic application function, please contact VINNOVA IT support on +46 (0)8 473 32 99, helpdesk@VINNOVA.se. Please note, the IT support desk closes when the main office shuts at 16.30 CET.

12. Application content

The application service comprises a number of electronic forms that are to be completed by the applicant. The application must be accompanied by a **project description**, a **participant list** and any **signed undertakings from involved third parties** (to be submitted under "other appendices"). Only these documents will be taken into consideration during the application process.

The appendices must be supplied in PDF format.

The **project description** must run over no more than 10 A4 pages in 12 point text. This requirement applies to both invitations aimed at the establishment of Living Labs environments and the support for creating and administering a Swedish network of Living Labs. The project description may be written in either Swedish or English and must cover all the areas and points specified below. However, applications for "a Swedish network of Living Labs" must initially address the points marked **(SN)**.

Heading	Contents
Title	Project title in Swedish and English (SN)
Summary	Summary (SN)
Relevance of project	<ul style="list-style-type: none"> • the need that the project aims to satisfy, the potential it has from a growth and innovation perspective (preferably quantified) and identification of who has the need in question (potential user of the results), (SN) • the result the project shall deliver and its link to the effect objectives specified in Section 5. (SN)

Project quality	<ul style="list-style-type: none"> • brief outline of the research and development front in the area, (SN) • the candidate Living Lab environment's strategic concept and existing areas of strength (within which area of user-centric development and innovation it is actual and practical to implement and its advantages over traditional development) • status of the candidate Living Labs environment in relation to the definition of a Living Lab given in the call for proposal. This is to be supplemented with own experiences of Living Labs. Identify the benefits that may be achieved and the effects a grant from VINNOVA will have. • the position of the candidate Living Labs environment in relation to state-of-the-art technology from an international perspective (i.e. uniqueness, news value, competitive criteria, etc.), • how the effects of the result are to be interpreted in terms of follow-up data/indicators.
Project implementation	<ul style="list-style-type: none"> • approach, strategy and methodology for the project, (SN) • third party undertakings. A description of the consortium/collaboration partners and their relationship to the project and association to related activities/projects within the parent organisations and the region. • a project plan containing a description of the methodology, a schedule, clear sub-objectives and a budget. The budget, i.e. both VINNOVA's contribution and any private financing, must cover the entire operation. Clear justification must be provided for why a certain activity is required and details must be given concerning how the specified resources will cover it. The plan must clearly state which parties are participating and what their roles will be. It must also describe what activities will be undertaken, who will carry them out and their scope (time and cost, as well as the scope and nature of investment in kind). (SN)
Exploitability and usefulness of the project.	<ul style="list-style-type: none"> • a plan showing how the project results are to be utilised (exploitation plan including skills, partners, time and cost of exploitation) (SN) • a description of how the activity in the Living Labs environment or network will continue once the project period has come to an end. (SN)
Risk analysis for the project	<ul style="list-style-type: none"> • risk factors (as well as a consequence and probability assessment per risk factor).

The **participant list** must contain the relevant CVs of the Project Manager and key project team personnel. The name, age, gender, title/function and scope of role in the project must be stated for all participants. The staff schedule must run over no more than **3** A4 pages in 12 point text.

Signed undertaking from participating third parties. Each participating party is afforded the opportunity of giving its own account in respect of the scope of its involvement in the part of the Living Labs initiative covered by the CfP (staff resources, financial resources, etc.). This must also state the reasons for, and significance of, that

party's participation in the project. Each party should specify a contact person. Max 1 A4 page in 12 point text per party.

13. Contacts

For further information about the programme, the CfP and the application process, contact:

Alexander Nilsson, Programme Manager
Tel.: +46 (0)8 473 30 55
e-mail: Alexander.Nilsson@VINNOVA.se

Pernilla Rydmark, Project Manager
Tel: +46 (0)8 473 30 78
e-mail: Pernilla.Rydmark@VINNOVA.se

Questions concerning administrative issues may be directed to:

Eva Nyström
Tel.: +46 (0)8 473 31 21
e-mail: Eva.Nystrom@VINNOVA.se