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# Regional Partnerships for Living Labs: the Case of Sicily and the MedLab Project

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**Abstract:** This paper addresses the issue of how the Living Lab model can be integrated into regional development policy, through a "demand-pull" approach to innovation in which institutional innovation plays a key role in the form of bottom-up partnerships between a range of actors. The MedLab project, funded by the ERDF in the MED programme, addresses this issue with eight partners in seven Mediterranean regions. The paper first discusses the case of a concrete experience in building a regional Living Lab partnership in the Sicilian region and how the lessons learned shaped the MedLab approach and workplan. The first activities in MedLab are then presented as a more structured attempt at laying the ground for stable Living Lab governance mechanisms that will be tested in the project's pilot projects. The ultimate aim is to permanently integrate the Living Lab approach as a transversal instrument of regional innovation policies in the Mediterranean basin, as a model for other regions in Europe.

# 1. Introduction and background

The Living Lab (LL) model for experimentation and co-creation with real users in real life environments has to date been promoted primarily within the ICT research community as a way of speeding up the pace and quality of research and technology development. Despite the claims that "Living Labs are about societal involvement, about promoting innovation in a societal basis, involving academia, SMEs, public institutions and large companies in an Open Innovation process that because it happens in real environments has an immediate impact" [1] few Living Labs have actually been initiated from the public or social side of the equation. There is thus to date no clear link with regional innovation policy, much less a common methodology for their definition and implementation within a public policy context.

The MedLab project [2], a Territorial Cooperation initiative funded by the MED program [3] and starting on April 1, 2009, is exploring this issue as the first explicitly Living Lab-oriented cooperation initiative to be funded under the ERDF's Objective 3. Its aim is to implement the Living Lab approach from the demand side of regional policy, building a governance structure that brings economies of R&D scope, social innovation and policy coherence to all levels, from the local community to the trans-national scale.

At the core of the pilot projects planned in MedLab is the building of regional and transnational Living Lab partnerships, their formalisation through Memoranda of Understanding, and the integration of the five planned sector-specific partnerships into an over-reaching Mediterranean Living Lab network. This emphasis on the governance dimension is particularly relevant for regionally oriented Living Labs, as it provides institutional innovation in the organisation of roles and responsibilities that can frame the social and technological innovation that drives the Living Lab itself. A good example of these dynamics, and an experience that had an important role in building the baseline for the MedLab approach, was the process of setting up the regional partnership for the Territorial Living Lab in the Sicilian Region (TLL-Sicily) [4], one of the ENoLL (European Network of Living Labs) "2<sup>nd</sup> wave" members.

## 2. Objectives and Methodology

The objective of this paper is, first, to describe the steps in building the TLL-Sicily partnership and reflect on some of the issues that emerged in the process. The main steps reported are a) the promotion of the idea to potential partners, b) identification and solution of conflicts and problems that arose, c) clarification of the expected results, d) drawing up and signature of the Memorandum of Understanding (MoU), and e) steps to promote the MoU towards regional policy-makers. Following a case study methodology, reflections on the experience gained are developed, with particular emphasis on how the lessons learned contributed to designing the MedLab workplan.

The second part of this paper describes the activities that structure the early months of the MedLab project, in which a first phase of policy development identifies R&D and development initiatives upon which to develop a LL policy for territorial innovation. More specifically, this involves specific surveys concerning regional and national policy frameworks, on-going Living Lab and R&D initiatives, and on-going initatives with a "demand pull" Living Lab potential.

The concluding section of the paper raises questions concerning the definition and structuring of the MedLab pilot projects, where the main emphasis will be on building partnerships similar to that of TLL-Sicily in all of the participating MedLab regions. The key issues identified investigate how the comparative policy survey will influence and be influenced by the partnership-building process, and to what degree this interaction is expected to strengthen the outcomes of each.

## 3. Case Study: the TLL-Sicily Partnership

#### 3.1 The TLL-Sicily Story

Different local authorities in the Sicilian Region have participated in INTERREG III Projects, inter-regional cooperation initiatives funded by DG Regio in the 2000-2006 programming period. The regional Planning Department [5] played an important role in INTERREG projects such as URBACOST, MEDISDEC, and PROGRESDEC, that dealt with how the European Spatial Development Perspective, or ESDP [6], can be applied at the level of regional strategic planning. A key part of the ESDP is the use of participatory decision-making processes, and this has been of particular relevance for the Planning Department, which has been applying this principle at the local level as a way of ensuring coherence with the Strategic Territorial Plan that the Planning Department is responsible for at the regional level.

In the fall of 2007 an encounter was arranged between the regional manager for European projects, Giovanni Salemi, and Alvaro Oliveira, one of the key figures of the Living Lab movement in Portugal. In this meeting, the similarities between participatory methods in planning and the Living Lab "co-design" approach became evident, and a new concept that integrates the two emerged: Territorial Living Lab. That idea began to take form when the regional research centre – CRES: Centro per la Ricerca Elettronica in Sicilia – expressed interest is developing a Living Lab in Sicily and starting from this territorial approach. From the outset, it was clear that although the Living Lab concept was of great

relevance to the needs of citizens, businesses and public authorities in Sicily, no single institution had the strength to drive such an initiative alone.

In open follow-up meetings between CRES and the Planning Department interest was confirmed in building a regional partnership to propose a multi-level Living Lab for the "2nd Wave" of ENoLL membership. In order to proceed and open the initiative to others, it was necessary to first clarify the vision. "Territorial Living Lab" would be the general concept and the initiative in Sicily would be the first instance of that concept, defined as follows:

"TLL Sicily is the first instance of a concept we have called "Territorial Living Lab", that integrally applies the LL approach to a territory and its citizens, its model of governance and its strategic plans for the future: in essence, it can be conceived of as a new model for regional development."

For the regional Planning Department, this is an important statement, because it increases the role of the Strategic Territorial Plan, opens the road for an integration of the territorial perspective of planning into the normally more economic perspective of programming territorial development, and openly declares the relevance of the territorial dimension to ICT R&D.

This concept was first presented to the ENoLL community at the Living Labs Event in Guimaraes (PT) in May 2007. Soon after, Karel Charvat of the Czech Rural Living Lab visited Palermo to meet with CRES and DRU-ARTA. An informal open meeting was also held with representatives of different local development initiatives as well as Sicilian ICT researchers and service providers, and Mr. Charvat was received by the mayors of the nearby towns of Bagheria and Santa Flavia. Interest around the TLL Sicily concept thus broadened to a wider community and converged on the ENoLL proposal, which was in fact based on the institutional and political partnership at the heart of the project.

In these encounters, it emerged that initial Living Lab experiments could be built simply by networking different on-going initiatives. In one concrete example, an already-funded ERDF project for fishery and coastal management planned to equip some 50 fishing boats with a PC to link up with a closed, satellite-based service. A regional start-up offering WSDL in rural areas [7] offered to mount a 20-mile range transmitter on the coast to test broadband Internet connections to the boats while at sea. At that point a local ISP showed interest in co-developing, directly with the participating fishing crews, new applications ranging from negotiating the sale of a catch in real time to performing environmental monitoring services. The Living Lab paradigm thus opened the possibility for a new partnership at a low additional cost, with significant added value for each of the participating actors and a potential gain in competitiveness for the community as a whole.

As the mechanism for delivering needed innovation through the ad hoc construction of partnerships became clear, other members joined TLL-Sicily, bringing in their problem to solve together with their specific field of expertise. Thus the Val d'Anapo Local Action Group (LAG, as set up under the LEADER+ programme for rural development) aimed to develop new applications to manage a natural reserve with the installation of a closed wireless network covering the entire area. MOTRIS, a regional initiative developing a new model of "Integrated Relational Tourism" entered the partnership to explore the role of mobile applications for its approach. COPPEM, a partnership of local authorities in the Euro-Mediterranean area, is interested in experimenting new technologies to promote intercultural dialogue. Herimed, a trans-Mediterranean association for cultural heritage, is developing multimedia applications for Immaterial Cultural Heritage. The potential for interaction among these players emerged most clearly when investigating scenarios for a Living Lab for the development and conservation of the Eleuterio River Basin in northern Sicily, where the agricultural, water management, planning, tourism and cultural heritage aspects all form part of an integrated strategy.

### 3.2 The Regional MoUs

A two-level structure began to emerge for the organisation of all of these initiatives. At the regional level, the Planning Department would coordinate the various development initiatives and their coherence with regional strategies. CRES would represent the technical side, promoting common platform elements and the interoperability of services developed in each case. At the local level, municipalities, development agencies, Local Action Groups and so on would take on responsibility for integrating Living Lab research and technology development into their specific development initiatives.

The formal acceptance of TLL-Sicily to ENoLL membership in the 2<sup>nd</sup> wave provided an important stimulus to make a formal agreement or Memorandum of Understanding. The MoU developed defines the objectives, role and responsibilities of the different categories of people and institutions participating in TLL-Sicily. The main commitment taken on in the MoU is to recognize the importance of the network and the interest in pursuing common objectives. Each partner assures their willingness to participate in a joint initiative if and when called on by another partner.

From the financial standpoint, the approval of ENoLL membership provided no funding, so the MoU clarifies that – at least in the first stages – there is no money directly managed by the partnership. As was learned in the preparatory phases, each partner already has access to specific sources of finance, and the idea is that the TLL partnership improves the possibilities for each partner to get funding through their own channels. For example, the Planning Department, which normally participates in INTERREG projects, is the MedLab partner on behalf of the TLL Sicily partnership. For the MedLab pilot projects, the MoU ensures the availability of the other TLL Sicily partners for collaboration.

The Planning Department has a special role in the TLL-Sicily partnership as the only regional Department to have signed the MoU; yet the transversal and inter-sectoral approach of TLL-Sicily implies the involvement of nearly all regional Departments as concerns their specific sectors of competence. Rather than enlisting each department (there are a total of 29) one by one, a specific Memorandum of Understanding with interested Departments is being formulated to bring them in to the Living Lab partnership by proxy. This open MoU will establish the responsibility of the Planning Department for ensuring smooth communication and transparency to all departments concerning developments in the European, national and regional Living Lab communities and information concerning partnerships being formed for specific initiatives in specific sectors. Participation in such initiatives will then be open to any interested Departments who will negotiate roles and responsibilities on a case-by-case basis.

#### 3.3 Lessons Learned

Over these last two years, building the TLL-Sicily partnership has not been an entirely smooth process as might appear from the previous description. Indeed, of the different scenarios mentioned above, none have yet materialised into concrete technology development initiatives. The key obstacles encountered have been:

- The open network envisaged for the regional partnership contrasts with the existing relationships and practice between the actors, as for example the dominating role of the Regional government in many contexts where it manages the funding or exercises a *de jure* role of control;
- The lack of any guarantee of funding for participation in the network, which instead aims to establish a framework drawing on a range of funding opportunities for all of the actors, made it difficult for some to negotiate and understand their role; and

• The lack of experience in working with such a varied partnership – large and small actors, public and private, local and international – was compounded by the fact that no single actor is proposed in a "leading" role; rather different partners act on behalf of the group according to the context of reference.

Overcoming these obstacles was instead driven by a series of balancing factors that underline the innovative nature of the agreement. These are:

- The vital role of the European dimension the visit from the Czech representative, the regular participation in ENoLL events in breaking the established, closed scheme of relations between the actors and allowing for a new approach; in this context the fact of being accepted into ENoLL with no funding has had a powerful effect of legitimising the network in contrast to normal institutional procedures;
- The transparency of the initiative open to any interested actor and the idea of a codesigned partnership together defining objectives and terms of the agreement, in contrast with the normal pre-conceived initiatives where control or "proxy" functions are assumed by the proposing institution, have proven essential for building "trust capital" as the key asset of the agreement; and
- The prospect that participation in the network increases the chances of any one participant to obtain funding from their traditional sources (e.g. INTERREG initiatives for the Regional Departments, LEADER projects for the local initiative actors, etc.) or even that the network as a whole can negotiate directly with policy-makers, empowers the participating institutions in a new way and constitutes a strong incentive.

In line with these insights, development of TLL-Sicily continues as on-going interplay between consensus formation at the regional level and dissemination and recognition at the European level, including the Slovenian Presidency event in Brussels in April 2008 [8], the "Living Labs and Regional Development" workshop held at eChallenges 2008 in Stockholm [9], the Living Lab Policy Networking Session at ICT2008 in Lyon [10] and indeed the approval of the MedLab project proposal itself.

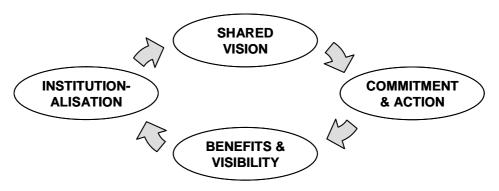


Fig. 1. The cyclic institutionalisation process

The TLL-Sicily partnership is thus not a static agreement but rather a cyclic process that gradually reinforces its institutional dimension as its participants see the benefits of collaboration. Membership continues to grow, with the recent addition of Confindustria Sicilia (the industrialists' association), the Province of Ragusa, the Municipality of Favara, and the Curella Foundation (economic policy research). This is also in view of collaboration with the regional Programming Department, responsible for Structural Funds, to examine the instruments available for funding Living Labs through the regional ERDF Operational Programme 2007-2013.

## 4. Policy Development in MedLab

The first operational phase of the MedLab project – the Policy Development component – was designed to provide a more structured framework within which to build Living Lab partnerships modelled on the Sicilian experience. The main ingredients at the base of the TLL-Sicily partnership can be seen as a) regional development and innovation policies, b) on-going technology R&D initiatives or products and services available for testing, and c) on-going development initiatives with a latent interest or need for new ICT products and/or services: a "demand-pull" potential for Living Lab-based technological and social innovation.

MedLab therefore carries out a structured survey of these three ingredients before proceeding to build the pilot partnerships, in the hope that this may lead to a clearer definition of who should participate as a function of the policy context framing the whole operation, with consequently greater commitment and more stables structures. This survey is thus conceived not as an isolated desk exercise, but as a structuring baseline for the pilot projects, evolving with their development. The outcome of the Policy Development activity – to identify the potential for integration of the Living Lab approach across the development objectives and institutional frameworks of different policy instruments within the framework of the Mediterranean region – will in turn be strengthened by having validated the policy hypotheses with the actors participating in the pilot partnerships.

MedLab further strengthens the significance of this approach by a) addressing these issues within the context of the common policy concerns of the Mediterranean regions and b) working at the transnational level with a range of institutional typologies, in order to capture the different perspectives present. Participating partners are located in Central Macedonia (GR), Cyprus (CY), Slovenia (SI), Sicily (IT), Latium (IT), Provence Alpes et Côtes d'Azur (FR), and Andalusia (ES), with an institutional mix composed of three regional authorities, a regional policy institute, a local development agency, one ministerial-level IT services company, one publicly-funded regional research centre and one university incubator, all having different perspectives on innovation policy and the potential contribution of the Living Lab approach. In addition, the participating regions host 6 of the 51 ENoLL (European Network of Living Labs set up by the Finnish Presidency) 1-2 wave sites, with 3 Living Labs directly represented in the survey team.

Research in the first of the three areas – regional innovation policies – carries out a survey of national and regional innovation and Information Society policies in the participating regions. It starts with the Art. 10 Information Society projects and the RISI program of the mid-'90s and covers the Innovative Actions, the Information Society Action Plans and other specifically regional programmes, including information on the relevant measures of each region's ERDF 2007-2013 Operational Program and in particular their Regional Innovation Strategies.

The second survey reviews existing Living Labs in the participating regions, as well as similar initiatives such as pilots based on the open innovation paradigm, etc. This work is supplemented by a description of all Living Labs in the participating countries that officially participate in ENoLL (from the current total of 119 Living Labs), and relevant FP5/6/7 projects in partner regions as well as similar initatives in other regions of potential significance for the MedLab pilots.

The third and final survey identifies local development initiatives in the participating regions with a potential for incorporation of the Living Lab approach, i.e. with a strong R&D component, technology investments, social innovation and participatory decision-making, etc. These are the initiatives with the strongest potential for development according to the "demand pull" innovation hypothesis underlying the MedLab project.

In the short term, these first results will provide a useful framework for identifying priority application areas for the Living Lab approach as a tool for regional development in the Mediterranean. The feasibility of the MedLab hypothesis – that Living Labs can be applied as a regional development instrument transversally across policy sectors – will have been tested in a significant range of national and regional contexts, and can provide a useful example for similar initiatives in other EU regions, from the Alpine Space to the Nordic area, having common policy priorities.

#### 5. Conclusions and Recommendations

The successive work planned in MedLab will validate this policy framework through pilot experiments in five areas - inno-SME networks, rural development, coastal zone management, participatory strategic planning and tourism. These are policy-oriented pilots based on the minimum infrastructure required to investigate the potential for the real development of Living Labs in the relevant application domains from the standpoint of available funding, coherence with policy priorities and, above all, the feasibility of building the most appropriate trans-national partnerships for full-scale implementation. In this process, the early cycles of co-design processes will allow for be the identification and specification of new ICT services and the development of an R&D roadmap for innovative applications specifically relevant to the regional development needs investigated.

As with the progenitor case of the Sicilian partnership, these processes will take place in an on-going interplay between the processes of partnership building, inter-regional dialogue and technology feedback, building on the lessons learned. The obstacles and difficulties encountered in setting up a Living Lab partnership in one of the less innovative territories in Europe have in fact led to insights that can be equally valuable for other regions, indeed highlighting some of the more innovative aspects of the LL approach itself. Regions with more advanced information society strategies are in fact more likely to have "Innovation Departments" in place, thus bypassing the need for such a complex partnership but also overlooking some of the more territorial, cultural and political aspects of the kind of innovation required to have a transversal effect on all dimensions of regional development.

Above all, the TLL Sicily experience has highlighted the need to explore the issue of the governance of innovation processes, not only in their technical and organisational dimensions but equally in the political, social and cultural implications of different governance models. The MedLab project aims to carry this work forward, providing valuable insights on these dynamics.

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