LIVING LABS AS TOOLS TO SUPPORT THE POLICY MAKERS IN THEIR DECISION MAKING ON SUSTAINABLE URBAN AND TERRITORIAL DEVELOPMENTS

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All over the world, the consumption of natural resources is rising rapidly; currently the challenge is how to imagine a new kind of growth and how to expand economic activities while, simultaneously reducing resource consumption. Decoupling human well-being from resource consumption is an urgent need for citizens and policymakers to reverse the environmental development and the contemporary trends that lead to a state of danger and territorial degradation. Nowadays, governments and industries are developing many application and policy measures to address decoupling of resource consumption from economic growth, in other words to reduce the negative environmental impacts. Among others, one pilot example is the work that the Dutch government is doing to move towards a circular economy by 2050.
One effective way to contribute to the reduction of raw materials and resource consumption is to understand waste as an innovative kind of resource, and to work with the improvement of cities' metabolisms. The increasing challenges of complex contemporary cities require co-creation processes with the involvement of several stakeholders to be addressed correctly. A possible method for steering such processes is the Living Lab approach (LL). LL is a tool to improve the innovation capabilities and competitiveness of territories, developed for policy makers to help them face the many socio-economic challenges of their territories, improving social inclusion. Based hereupon, new development can take place in the LL as a result of co-creation. LLs identify sustainable activities that are coherent with the territory and competitive in some ways if compared with global economies, and put them in contact with the ones that already exist in the same area.

The main question addressed in this paper is: how can Living Labs be applied to develop a geodesign decision support environment (GDSE) to support the policy makers in their decision making on sustainable urban and territorial development? The research for this paper is part of the project REPAiR[1] that is using Living Labs as an innovative tool to provide local and regional authorities with an innovative transdisciplinary open source developed and implemented in Living Labs in six metropolitan areas, namely Naples, Ghent, Hamburg, Pécs, Łódź and Amsterdam.

In REPAiR, Living Labs are organized as decision support environments where representative of universities, governance, corporations and in addition individuals make decisions that depend on their role and expertise. In this framework, design professionals, information technologist and scientists give contributions to decide what to do and how to do that in each case study area. In order to make a decision that is site specific, it is necessary to compare several opportunities and alternatives that should be developed in the Living Labs, after the evaluation of the current situation of the place. In the elaboration of the diverse alternatives and eco-innovative solutions, scale and size are fundamental.

The different disciplines involved in the PULL have different methods to imagine change models that work at different scales simultaneously.This paper will present the Living Lab methodology developed for REPAiR, will shed light on the possibility for cross case learning from and between the cases.

[1] “REPAiR - REsource Management in Peri-urban Areas: Going Beyond Urban Metabolism”